

TABLE OF CONTENTS

Ch. 1	USING MONO COUNTY'S MEA	1
	Mono County	1
	The Mono County Master Environmental Assessment	1
	Legal Authority for Master Environmental Assessment	1
	Summary of 2001 MEA Update	2
	MEA Maps	2
	Site-Specific Mono County Documents	2
	Additional Resources for Mono County	6
Ch. 2	PLANNING AND SOCIOECONOMICS	7
	LOCAL AGENCY PLANS AND POLICIES	7
	Mono County General Plan	7
	Area Plans	7
	June Lake Redevelopment Plan	9
	Mono County Local Agency Formation Commission (LAFCO)	9
	Regional Transportation Plan (RTP)	9
	Airport Land Use Compatibility Plans (ALUPs)	10
	Mono County Solid Waste Management Plan	14
	Town of Mammoth Lakes	14
	Collaborative Planning and Management	14
	Los Angeles Department of Water and Power (LADWP or DWP)	14
	STATE AGENCY PLANS AND POLICIES	15
	California Department of Conservation, Division of Mines and Geology	15
	California Department of Conservation, Division of Oil and Gas	15
	California Department of Conservation, Office of Mine Reclamation	15
	California Department of Fire and Forestry (CDF)	15
	California Department of Fish and Game	15
	California Department of Housing and Community Development	16
	California Department of Parks and Recreation	16
	California Department of Transportation	16
	Great Basin Unified Air Pollution Control District (GBUAPCD)	17
	Lahontan Regional Water Quality Control Board (LRWQCB)	17
	State Lands Commission	17
	FEDERAL AGENCY PLANS AND POLICIES	19
	Bureau of Indian Affairs (BIA)	19
	Bureau of Land Management (BLM)	19
	Natural Resources Conservation Service	20
	U.S. Army Corps of Engineers	20
	U.S. Fish and Wildlife Service	22
	U.S. Forest Service – Humboldt-Toiyabe National Forest	22
	U.S. Forest Service – Inyo National Forest	22
Ch. 3	LAND USE	23
	Setting	23
	Land Ownership Patterns	23
	Existing Land Use	24
	Community Land Use	25
	Antelope Valley	26
	Swauger Creek, Devil's Gate	27
	Bridgeport Valley	28
	Mono Basin	29
	June Lake	30
	Mammoth Vicinity, Upper Owens	31
	Long Valley	32

	Wheeler Crest	33
	Paradise	34
	Benton, Hammil, Chalfant	35
	Oasis.....	36
	Timber Lands.....	37
	Agricultural Lands.....	37
	Rangelands.....	38
	Zoning.....	38
	Buildout and Sustainable Development	38
Ch. 4	COMMUNITY SERVICES AND FACILITIES.....	39
	County Services and Facilities.....	39
	Educational Facilities	39
	Library	40
	Health Services	40
	Paramedic Services	46
	Fire Protection.....	46
	Police Services.....	46
	Water Systems	47
	Wastewater Facilities	48
	Solid Waste and Hazardous Waste Facilities	48
Ch. 5	DEMOGRAPHICS AND ECONOMIC DATA	49
	POPULATION CHARACTERISTICS	49
	Historical Population Growth	49
	Recent Population Growth	50
	Population Projections.....	50
	2000 Census.....	51
	Summary of 2000 Census Data for Mono County	52
	Maximum Population at Buildout.....	53
	Population Composition	54
	Special Population Groups – Handicapped and Disabled	55
	ECONOMIC DATA	56
	Economic Overview.....	56
	Employment Trends	56
	Employment Rates	57
	Employment by Industry	57
	Employment by Size of Firm	57
	Occupational Growth	58
	Income	58
	Poverty Levels	63
	Well-Being in Forest Dependent Communities	63
Ch. 6	HOUSING	66
	Household Characteristics.....	66
	Female-Headed Households	67
	Elderly	67
	Housing Characteristics	67
	Housing Stock.....	67
	Housing Costs	67
	Tenure and Occupancy	68
	Unit Size	69
	Overpayment	69
	Overcrowding.....	69
	Substandard Housing Units and Rehabilitation.....	70

Special Groups Housing Needs	70
Handicapped and Disabled	70
Elderly	72
Emergency Shelter Needs and Homeless Housing	72
Female-Headed Households	73
Large Households	73
Farmworkers.....	73
Ethnicity	73
U.S. Marine Corps.....	74
Energy Conservation	74
Ch. 7 TRANSPORTATION	75
Chapter Overview.....	75
Summary of Transportation System.....	75
Land Use Forecasts	76
Local Residential Traffic/Transportation.....	76
Commuters	76
Recreational/Tourist Traffic.....	76
Air Quality Attainment Status	76
National Non-Attainment Areas	76
State Non-Attainment Areas	76
Transportation Related Air Quality Mitigation	77
Performance Conditions (LOS)	77
Safety and Operational Issues, Including Emergency Preparedness.....	78
Maintenance of the Existing Regional Transportation System	79
Overview	79
Highway System	79
Interregional Travel Demand and Corridor Needs.....	81
U.S. Highway 395.....	81
U.S. Highway 6.....	81
State Routes 120, 167, 182, 108 and 89	81
Mountain Passes.....	81
Capacity Issues	82
Regional Problems	82
Local Problems	82
Average Daily Traffic Volumes.....	82
Specialized Needs/Recreational Traffic.....	82
Goods Movement.....	85
Local Corridor Needs	85
Overview	85
State Route 203	86
State Route 158	86
County Roads	86
Roads on Native American Lands	87
Traffic Demand, Mono County	87
Demand Management Strategies	88
Parking Management	89
Environmental and Energy Impacts.....	89
Impacts Resulting from Transportation System Improvements	89
Environmental Mitigation Measures and Enhancement Projects	89
Impacts to Local Wildlife from Increased Use of System.....	89
Community Needs and Issues	90
Antelope Valley (Topaz, Coleville, Walker).....	90

	Swauger Creek/Devil's Gate	90
	Bridgeport Valley	90
	Bodie Hills (Issues/Needs identified in the Bodie Hills Multi-modal Plan)	91
	Mono Basin (Issues/Needs identified in the Mono Basin Multi-modal Plan)	91
	June Lake (Issues/Needs identified in the June Lake Multi-modal Plan)	93
	Mammoth Vicinity/Upper Owens.....	95
	Long Valley (Long Valley, McGee Creek, Crowley Lake, Aspen Springs, Sunny Slopes)	95
	Wheeler Crest/Paradise (Swall Meadows, Pinon Ranch)	95
	Tri-Valley (Benton, Hammil, Chalfant).....	95
	Oasis.....	96
	Resource Sharing and Partnership Opportunities.....	96
	Coordination with Caltrans System Planning.....	96
	Cross-Jurisdictional Communication Network Needs	96
	Scenic Routes/Scenic Highway Designation	97
	Transit.....	97
	Existing Transit Services	97
	Transit-Dependent Populations.....	99
	Non-Motorized Facilities	100
	Aviation.....	103
Ch. 8	VISUAL RESOURCES	106
	Overview	106
	Community Areas.....	107
	Scenic Highways in Mono County	107
	Visual Resource Protection	113
	National Forest Visual Management System.....	113
	BLM Visual Resource Management System.....	114
	Scenic Highway Designation and Protection.....	114
	Federal Scenic Byway Designation.....	115
	County Protection of Visual Resources.....	115
Ch. 9	OUTDOOR RECREATION	116
	Existing Facilities.....	116
	National Forest Lands	116
	State Department of Parks and Recreation.....	116
	Mono County.....	117
	Town of Mammoth Lakes.....	117
	Plans to Acquire or Improve Recreation Facilities	117
	Wild and Scenic Rivers.....	117
	Visitor Information	121
	Recreation Programs.....	121
Ch. 10	CULTURAL RESOURCES	137
	Overview	137
	Prehistoric Resources.....	138
	Historical Resources	141
	Legislation Pertaining to Cultural Resources.....	143
	The National Environmental Policy Act (NEPA).....	143
	California Environmental Quality Act (CEQA).....	143
	Legislation Pertaining Specifically to Archaeological Resources	143
	The Archaeological Resources Protection Act (ARPA).....	143
	Legislation Pertaining Specifically to Historical Resources	144
	National Historic Preservation Act (NHPA).....	144
	State Historic Preservation Office.....	144

County Historic Preservation Legislation	144
Legislation Pertaining Specifically to Native American Resources	144
American Indian Religious Freedom Act	144
Treaties	144
California Native American Historical, Cultural, and Sacred Sites Act	145
California State Senate Bill 297	145
Cultural Resource Management in the County	145
Inyo National Forest	145
Toiyabe National Forest	145
Bureau of Land Management	146
State of California	146
Mono County	147
Ch. 11 CLIMATE AND AIR QUALITY	149
Climate, Meteorology and Topography	149
Temperature	149
Wind	149
Precipitation	149
Inversions	149
Wildfires and Fire Suppression Activities	151
Mono Lake	151
Geothermal Resource Development	152
Existing Air Quality	153
National Non-Attainment Areas	153
State Non-Attainment Areas	153
Transportation Related Air Quality Mitigation	154
Sensitive Receptors	154
Ch. 12 GEOLOGY AND SOILS	156
Topography	156
Geology	156
Geologic Structure and Faulting	158
Unique Geologic Features	159
Mineral Resources--Mining	159
General Mining Resource Assessment	161
State and Local Mining Requirements	162
Soils	162
Soil Erosion	163
Soil Permeability	163
Ch. 13 HYDROLOGY	165
Introduction	165
Major Hydrologic Basins	165
Walker River Basin	165
East Walker River	183
West Walker River	184
Walker Basin Water Rights	184
Future Development	185
Mono Basin	185
Owens River Basin	187
Owens River Gorge	188
Mammoth Lakes Basin	188
Benton, Hammil and Chalfant Valleys	189
Fish Slough	190
Groundwater Basins and Recharge	191

	Export of Groundwater	193
	Shallow Groundwater	193
	Long Valley Hydrologic Advisory Committee	193
	Water Budget for Long Valley	197
	Water Quality	199
	Sedimentation	199
	Chemical Bacterial Contamination	199
	Wastewater Management	200
Ch. 14	GEOTHERMAL RESOURCES	202
	Types of Geothermal Resources	202
	Hydrothermal Resource Development	202
	Exploration	202
	Field Development	204
	Electric Power Generation	204
	Direct Applications	204
	Historical Summary of Geothermal Resource Development in Mono County	204
	Geothermal Resource Potential in Mono County	207
	Potential Impacts of Geothermal Development	207
Ch. 15	ENERGY RESOURCES	211
	Solar Energy Resources	211
	Solar Zones	211
	Mono County Solar Energy Potential	212
	Wind Energy Resources	214
	Hydroelectric Resources	216
	Existing Hydroelectric Power Generation	216
	Transmission Corridors	218
	Existing Transmission Corridors	218
	Proposed Corridors for Future Use	218
	Potential Impacts of Transmission Lines	218
	Energy Conservation	219
	Energy Conservation Standards	219
	Building Energy Efficiency Standards	219
	Appliance Energy Efficiency Standards	220
	Voluntary Energy Conservation	220
Ch. 16	NOISE	221
	Description of County Noise Environment	221
	Major Noise Sources in Mono County	221
	Community Noise Survey – Baseline 1980-1981 Study	228
	Community Noise Survey – 1996 Update	228
	County Roads	229
	State and Federal Highways	229
	Bodie State Historic Park	230
	Mammoth/Yosemite Airport	230
	Projected Future Noise Environment	230
	Noise Sensitive Areas	230
	Current Regulations of the Noise Environment	231
Ch. 17	BIOLOGICAL RESOURCES	233
	Vegetation	233
	Climatic and Soil Influences on Vegetation	233
	Vegetation and Landcover	233
	Influence of Insect Pests and Pathogens on Sierra Forests	244
	Status of Rare and Endemic Plants Species	245

Impact of Nonindigenous Plants	246
East-Slope Sierran Ecosystems and Fire.....	247
Rangelands.....	247
Wildlife	249
Mule Deer.....	249
Bighorn Sheep.....	256
Birds.....	257
Reptiles and Amphibians.....	264
Invertebrates	264
Fisheries and Other Aquatic Resources	269
Status of Aquatic Habitat Types	271
Status of Fish and Fisheries.....	271
Biotic Integrity of Watersheds	272
Potential Aquatic Diversity Management Areas	273
Special Habitats	275
Riparian Areas and Wetlands.....	276
Wildlife Use Areas	278
Biological Research Areas	278
Special-Status Species	283
Ch. 18 PUBLIC HEALTH AND SAFETY	292
Emergency Response.....	292
Police.....	292
Hospitals and Emergency Services.....	292
Fire Control	292
Immobile Populations	292
Public Gathering Places.....	292
Hazardous Wastes	294
Current Waste Generation.....	294
Waste Shipped Off Site.....	294
Waste Managed On Site	294
Geothermal	294
Contaminated Sites	294
Solid Waste	294
Designated and Hazardous Wastes Going to Nonhazardous Waste Facilities...	294
Wastes Imported and Exported	294
Projected Waste Generation.....	294
Large Industrial Generators.....	294
Contaminated Sites	294
Projected Commercial TSD Capacity	294
TSD Facility Inventory	294
Hazardous Waste Reduction.....	295
Existing Hazardous Waste, Materials Transportation and Spill Response.....	295
Present Policies and Programs	295
Emergency Response Program	295
Storage Regulations	295
Contaminated Sites	295
Small Quantity Generators	295
Household Hazardous Wastes.....	295
Hazardous Materials	296
Ch. 19 NATURAL HAZARDS	297
Seismic Hazards	297
Earthquakes	297

Fault Movement	297
Groundshaking	297
Ground Failure	297
Geologic Hazards	298
Rockfall, Mudflow and Landslide Hazards	298
Subsidence	298
Volcanic Hazards	298
Avalanche Hazards	299
Avalanche Studies and Maps	299
Avalanche Monitoring and Evacuation	301
Flood Hazards	301
Dam Failure	301
Seiches	301
Fire Hazards	302
Wildland Fire and Fuels	302
East-Slope Sierran Ecosystems and Fire	302
Wildland Fires in Mono County	304
Fire Management Policies and Programs	305
Landscape Level Strategies for Forest Fuel Management	306
Urban Fires	308
Clearance Around Structures	308
Peak Load Water Supplies	308
Road Widths	308
Evacuation Routes	308
GLOSSARY	309
REFERENCES	312
References Consulted	312
Mono County Project Documents Consulted	320
Persons Consulted	321
Internet Reference Sites	323
State Agencies	323
Federal Agencies	325
Local Entities	326

FIGURES

Figure 1	Area Plan Boundaries.....	8
Figure 2A	ALUP (ALUP) Boundaries--Bryant Field Airport.....	11
2B	ALUP (ALUP) Boundaries – Lee Vining Airport.....	12
2C	ALUP (ALUP) Boundaries – Mammoth/Yosemite Airport	13
Figure 3	Lahontan Drainage Basins and Hydrologic Units.....	18
Figure 4	Land Ownership/Jurisdictional Boundaries	21
Figure 5A	Community Facilities – Cemeteries.....	41
5B	Community Facilities – Solid and Liquid Waste Facilities.....	42
5C	Community Facilities – Libraries.....	43
5D	Community Facilities – Fire Stations.....	44
Figure 6	School Facilities	45
Figure 7	Historical Population	49
Figure 8	Existing Highway System, Mono County	80
Figure 9	Designated State Scenic Highways.....	109
Figure 10	Designated County Scenic Highways.....	110
Figure 11	Cross-section of Long Valley Caldera.....	160
Figure 12	Groundwater Basins and Recharge Zones	192
Figure 13	Geothermal Resources.....	203
Figure 14	Hot Creek Buffer Zone	209
Figure 15	Hot Creek Deer Migration Zone.....	210
Figure 16	Wind Resource Areas	215
Figure 17	Hydroelectric Plants and Transmission Corridors.....	217
Figure 18	Vegetation and Landforms, CA GAP Analysis	237
Figure 19	Vegetation and Landforms, USGS Analysis	239
Figure 20	Deer Herd Use Areas.....	253
Figure 21	Deer Kill Locations – Mono County	255
Figure 22	Volcanic Hazards	300
Figure 23	Fire Hazards	307

TABLES

Table 1	Land Ownership	24
Table 2	Fire Protection Districts in Mono County.....	47
Table 3	Mono County Population, 1970-2000.....	50
Table 4	Mono County Population Projections, 2000-2020.....	50
Table 5	Mono County Population Projections by Community Areas, 2000-2020.....	53
Table 6	Buildout by Planning Area – Mono County	54
Table 7	Population by Age, Mono County – 1990.....	55
Table 8	Size of Firm	57
Table 9	1989 Household Income, Mono County (1990 Census).....	58
Table 10A	Personal Income From Labor and Non-labor Sources by Major Category, 1970-1995	59
Table 10B	Personal Income Earned in Service Industries, Ranked by Size, 1995.....	60
Table 10C	Personal Income by Industry Groupings	61
Table 10D	Transfer Payment Details, 1970-1995	62
Table 11	Public Assistance Recipients by Program.....	63
Table 12	Estimated and Projected Households, Mono County.....	66
Table 13	Average Persons per Household	66
Table 14	Housing Unit County, 1990 – Unincorporated Areas.....	67
Table 15A	Housing Costs – Median Home Value.....	68
Table 15B	Housing Costs – Median Contract Rent	68
Table 16	Increase in Housing Value, Rent and Household Income, 1980-1990	68
Table 17	Housing Conditions – Unincorporated Area, 1992.....	71
Table 18	1990 and 1998 Average Daily Traffic (ADT) Volumes, Mono County Highways	84
Table 19	Mileage of Maintained Public Roads as of December 31, 1999.....	86
Table 20	Traffic Demand Projections, Mono County	87
Table 21	Population Projections, Young People and Seniors	99
Table 22	Public Assistance Recipients by Program.....	100
Table 23	Mono County Airports, Operational Data, 1998	104
Table 24	Mono County Airports – Landing and Navigational Aids.....	104
Table 25	Mono County Scenic Highway System	111
Table 26	Public Use of National Forest Facilities in Mono County by Activity.....	118

Table 27	Park and Recreation Facilities – Mono County and Mammoth Lakes	120
Table 28	Ski Area Use Data in Mono County	121
Table 29	National Forest Recreation Facilities.....	122
Table 30	Developed Recreation Facilities, Mono County	124
Table 31	Characteristics of Mono County Indian Tribes.....	140
Table 32	California Points of Historical Interest.....	147
Table 33	Volcanic Rocks Associated with Activity in the Long Valley Caldera System	157
Table 34	Surface Water Resources.....	166
Table 35	Groundwater Resources	193A
Table 36	Long Valley Hydrologic Advisory Committee Monitoring Plan.....	195
Table 37	Water Budget for Long Valley Drainage Basin for Water Years 1964 to 1974	198
Table 38	Data on Selected Exploratory Wells in Mono County	208
Table 39	Solar Energy Resources.....	213
Table 40	Annual Average Daily Traffic (AADT).....	223
Table 41	Peak Hour Traffic – State and Federal Highways	224
Table 42	Percent of Highway Traffic That is Trucks.....	225
Table 43	Average Noise Level Emitted, Motor Vehicles and Aircraft	226
Table 44	Airport Activity Information.....	227
Table 45	Traffic Counts and Noise Measurements – County Roads, 1996	229
Table 46	Vegetation Communities in Mono County	241
Table 47	Mammals Known or Expected to Occur in Mono County.....	250
Table 48	Birds Known or Expected to Occur in Mono County	258
Table 49	Invertebrates Known or Expected to Occur in Mono County	266
Table 50	Fish Known or Expected to Occur in Mono County	275
Table 51	Mono County Special Habitats	279
Table 52	Biological Research Areas.....	280
Table 53	Special-status Species Known to Occur in Mono County	284
Table 54	Locations and Types of Immobile Populations	293
Table 55	Structures in Flood Zones.....	302

CHAPTER 2

PLANNING AND SOCIOECONOMICS

Numerous agencies have plans and policies that affect land use and development in the county on both private and public lands. This chapter provides a brief synopsis of those plans and policies. It also summarizes several collaborative approaches to planning and resource management in the Eastern Sierra.

LOCAL AGENCY PLANS AND POLICIES

MONO COUNTY GENERAL PLAN

California Government Code § 65300 requires each county to "adopt a comprehensive long-term general plan for the physical development of the county."

The Mono County General Plan acts as a foundation for all land use decisions; it expresses development goals for the county as a whole and for individual communities and embodies public policy on the distribution of future land uses. The General Plan addresses a broad and evolving range of issues associated with development, including physical, social and economic concerns, in seven mandatory elements: Land Use, Circulation, Housing, Noise, Safety, Conservation and Open Space.

The Mono County General Plan also contains a Hazardous Waste Management Element, prepared in accordance with the State Department of Health Services (DHS) Guidelines for the Preparation of Hazardous Waste Management Plans. The objective of the planning process is "to ensure that safe, effective and economical facilities for the management of hazardous wastes are available when they are needed, and that these facilities are of a type, and operated in a manner, that protects the public health" (California DHS, 1987a). The current Mono County General Plan is a revision of previously adopted general plan elements; it supersedes and replaces those elements. Although the plan covers the entire county, detailed planning focuses on private lands and lands owned by the Los Angeles Department of Water and Power.

AREA PLANS

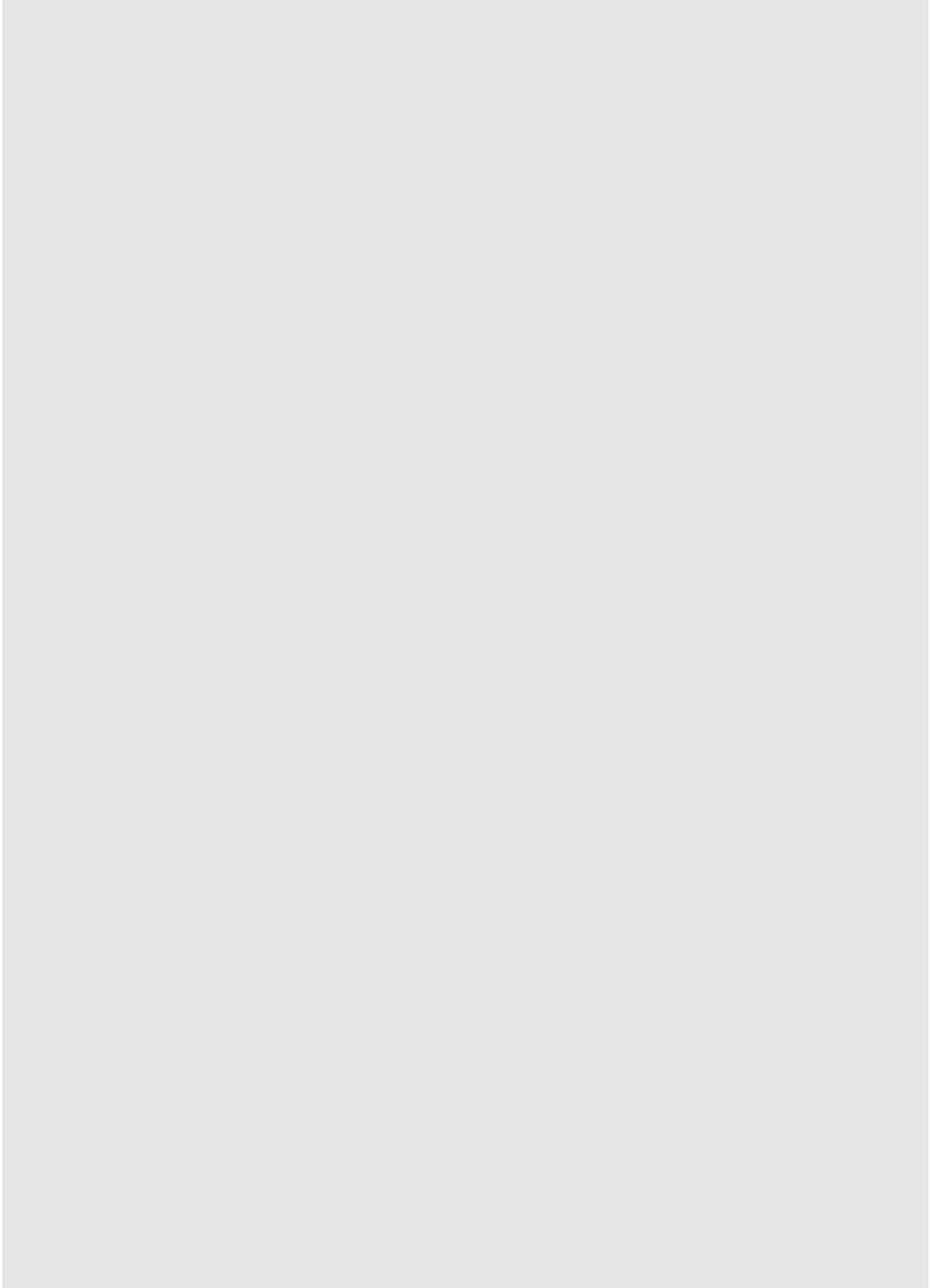
Area Plans further refine county general plan policies to address the needs of a particular community or area. Area Plans identify issues that are important to the community and establish goals, policies and programs to address those issues. Land use policies for all community areas have been included in the Land Use Element of the County General Plan. The following communities or areas in Mono County have adopted Area Plans:

*Antelope Valley
Swauger Creek
Devil's Gate
Bridgeport Valley
Bodie Hills*

*Mono Basin
June Lake
Mammoth Vicinity
Upper Owens
Long Valley*

*Wheeler Crest/Paradise
Benton, Hammil, Chalfant
Oasis*

FIGURE 1
AREA PLAN BOUNDARIES



Area Plan policies were developed by the Regional Planning Advisory Committees (RPACs) for each community planning area. Figure 1 shows the boundaries of the community planning areas. In addition to the Area Plans, Specific Plans provide detailed direction for implementation of General Plan policies for specific areas throughout the county. Specific Plans have been adopted for a number of parcels in Mono County.

JUNE LAKE REDEVELOPMENT PLAN

A redevelopment feasibility study has been prepared for the June Lake community. The study is an outgrowth of policies contained in the June Lake Area Plan. The study finds that use of redevelopment powers for June Lake is feasible and the establishment of a redevelopment agency and preparation of a redevelopment plan could become a major implementing mechanism for achieving the goals of the June Lake Area Plan (Mono County, 1989).

MONO COUNTY LOCAL AGENCY FORMATION COMMISSION (Sphere of Influence Reports, Government Reorganization Studies)

The Local Agency Formation Commission (LAFCO) is required to prepare a Sphere of Influence Report for each special district and city in the county. The Sphere of Influence study defines the ultimate service area and boundary of a local agency and recommends future governmental reorganizations. The purpose of these studies is to encourage the orderly formation of local agencies, to discourage sprawl and to preserve valuable open space and agricultural lands. Mono LAFCO has adopted Spheres of Influence for all but one of the approximately 26 local agencies within the county.

The preparation of governmental reorganization studies is a function of LAFCO that is often an outgrowth of Sphere of Influence recommendations. Mono LAFCO conducted a reorganization study for the Benton/Hammil/Chalfant area that ultimately resulted in the reorganization of fire protection agencies in that area.

REGIONAL TRANSPORTATION PLAN (RTP)

Section 65080 et seq. of the California Government Code requires the preparation of Regional Transportation Plans (RTPs) and the update of those plans on a biennial basis. The purpose of a Regional Transportation Plan is to:

- Provide a clear vision of the regional transportation goals, policies, objectives and strategies;
- Provide an assessment of the current modes of transportation and the potential of new travel options within the region;
- Predict the future needs for travel and goods movement;
- Identify and document specific actions necessary to address the region's mobility and accessibility needs;
- Identify guidance and document public policy decisions by local, regional, state and federal officials regarding transportation expenditures and financing;
- Identify needed transportation improvements, in sufficient detail, to serve as a foundation for the: 1) Development of the Federal Transportation Improvement Program (FTIP), the Regional Transportation Improvement Program (RTIP) and the Interregional Transportation Improvement Program (ITIP);
- Facilitate the National Environmental Protection Act (NEPA)/404 integration process decisions;
- Identify project purpose and needs;
- Develop an estimate of emissions impacts for demonstrating conformity with the air-quality standards identified in the State Implementation Plan (SIP);

- Promote consistency between the California Transportation Plan, the regional transportation plan and other transportation plans developed by cities, counties, districts, private organizations, tribal governments, and state and federal agencies responding to statewide and interregional transportation issues and needs;
- Provide a forum for: 1) participation and cooperation, and 2) to facilitate partnerships that reconcile transportation issues that transcend regional boundaries; and
- Involve the public, federal, state and local agencies, as well as local elected officials, early in the transportation planning process so as to include them in discussions and decisions on the social, economic, air quality and environmental issues related to transportation.

State and federal planning laws require extensive coordination with applicable local, state and federal plans and programs during the development of the RTP. The Mono County Local Transportation Commission (LTC) adopts the RTP. Since 1980, the RTP has also been adopted as the Circulation Element of the County's General Plan.

AIRPORT LAND USE COMPATIBILITY PLANS (ALUPs)

The Airport Land Use Compatibility Plan (ALUP) is a framework for the orderly growth and development of an airport planning area over a 20-year timeframe. Similar to an Area Plan, the ALUP is more specific than the countywide General Plan. Compatibility plans have two purposes:

1. To provide for the orderly growth of each public airport and the area surrounding the airport within the jurisdiction of the Airport Land Use Commission; and
2. To safeguard the general welfare of the inhabitants within the vicinity of the airport and the public in general.

The Mono County Airport Land Use Commission has adopted Airport Land Use Plans for the Mammoth/Yosemite Airport, Bryant Field in Bridgeport and the Lee Vining Airport. The boundaries of those planning areas are shown in Figures 2A, B and C.

FIGURE 2A
AIRPORT LAND USE PLAN (ALUP) BOUNDARIES
BRYANT FIELD AIRPORT



FIGURE 2B
AIRPORT LAND USE PLAN (ALUP) BOUNDARIES
LEE VINING AIRPORT

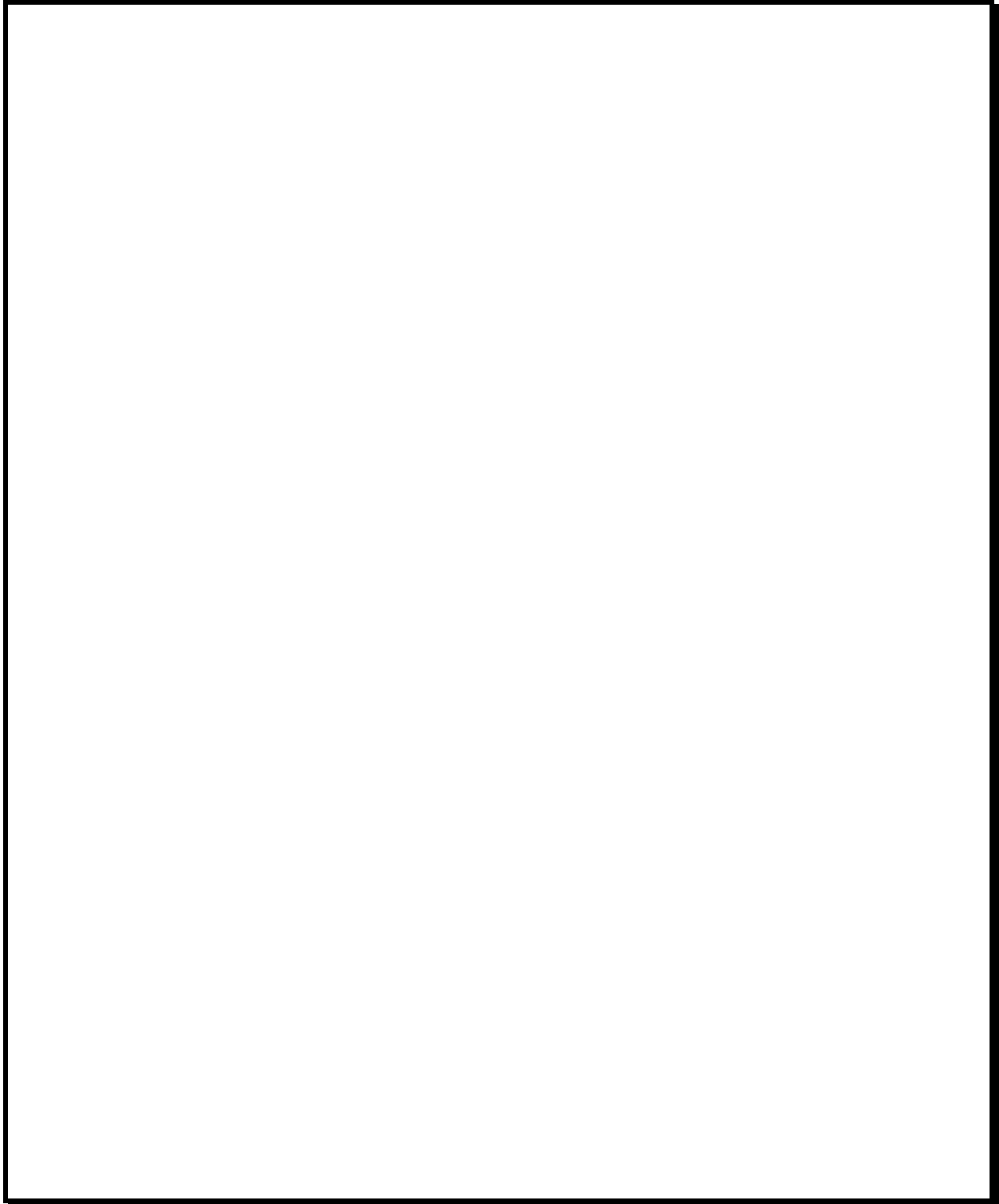


FIGURE 2C
AIRPORT LAND USE PLAN (ALUP) BOUNDARIES
MAMMOTH/YOSEMITE AIRPORT



MONO COUNTY SOLID WASTE MANAGEMENT PLAN

The Solid Waste Management and Resource Recovery Act of 1972 requires that each county prepare and implement a Solid Waste Management Plan (SWMP). The County's Land Use Element must reflect the policies of the SWMP, specifically future locations for solid waste disposal facilities. The County is in the process of updating its SWMP (Mono County, 2000).

TOWN OF MAMMOTH LAKES

The Town of Mammoth Lakes' General Plan includes the seven mandatory elements as well as an optional Parks and Recreation Element. The Town is in the process of updating its General Plan.

COLLABORATIVE PLANNING AND MANAGEMENT

[Coalition for Unified Recreation in the Eastern Sierra (CURES) and Mono County Collaborative Planning Team (MCCPT)]

The following discussion is an excerpt from the Status of the Sierra Nevada--Sierra Nevada Ecosystem Project: Final Report to Congress (1996). The text below should be regarded as direct quotations from the source material; page numbers indicated in parentheses refer to the SNEP document and cover the previous paragraph or section.

Many Sierran ecosystem declines are due to institutional incapacities to capture and use resources from Sierran beneficiaries for investment that sustains the health and productivity of the ecosystems from that benefits derive.

Institutional incapacities arise from four primary sources: (1) fragmented control of ecosystems among different jurisdictions, authorities and ownerships; (2) absence of exchange mechanisms among these entities to sustain rates of investment and cooperative actions that reflect ecosystem values; (3) detachment between those who control ecosystems and communities that depend upon and care for them; and (4) inflexibility in response to rapid changes in population, economy and public interests (SNEP, Vol. I, Ch. 3, p. 48).

The Coalition for Unified Recreation in the Eastern Sierra (CURES) is an informal partnership of recreation providers, chambers of commerce, local businesses, the environmental community, and federal, state and local governments. As its mission, "CURES is dedicated to preserving the Eastern Sierra's natural, cultural and economic resources and enriching the experiences of visitors and residents." (SNEP, Vol. I, Ch. 3, p. 60).

Through their collaborative efforts, CURES members are leveraging dollars, avoiding duplication of effort, and providing high-quality recreation to visitors and residents of the area. In line with achieving their vision, their efforts are working toward a regionally sustainable economy that is linked to the sustainability of the natural environment of the Eastern Sierra (SNEP, Vol. I, Ch. 3, p. 60).

The Mono County Collaborative Planning Team (MCCPT), with members from federal, state and local governments and agencies, has developed a set of Guiding Principles that articulate a shared vision for the future of Mono County and that are intended to be used by member agencies and other entities to plan and manage resources and development in the county.

LOS ANGELES DEPARTMENT OF WATER AND POWER (LADWP or DWP)

[\[www.ladwp.com\]](http://www.ladwp.com)

The LADWP owns approximately 63,000 acres in Mono County, most of which were acquired in the early 1900s in order to gain water rights and an inexpensive water supply for Los Angeles. This land continues to be managed by the LADWP in order to maintain water resource holdings. As a large landowner in Mono County, the Los Angeles Department of Water and Power (LADWP) is subject to all county, state and federal land use policies and regulations.

STATE AGENCY PLANS AND POLICIES

CALIFORNIA DEPARTMENT OF CONSERVATION, DIVISION OF MINES AND GEOLOGY [www.consrv.ca.gov/dmg]

The Surface Mining and Reclamation Act of 1975 (SMARA) establishes a statewide policy for the conservation and development of mineral lands in California, as well as requirements for permit and reclamation plan approval prior to conducting surface mining operations in the state. Mono County is the lead agency for implementation of SMARA, which pertains both to exploration and production activities. The Mono County Land Development Regulations include a Reclamation Ordinance and a Mining Operations Ordinance. The General Plan contains a Resource Extraction land use designation and Mineral Resource Policies in the Conservation/Open Space Element. State and local mining requirements are discussed further in the section of this document entitled Geology and Soils.

CALIFORNIA DEPARTMENT OF CONSERVATION, DIVISION OF OIL AND GAS [www.consrv.ca.gov/dog]

Any private or public entity proposing to drill, rework or abandon an oil, gas or geothermal well must obtain written approval from the Division of Oil and Gas. The Division issues a specific type of permit for each of these three activities. The purposes of regulation are to prevent damage to underground deposits, to prevent loss of geothermal reservoir energy, to prevent environmental damage to underground and surface waters and to the land surface, to prevent hazardous conditions, and to encourage the wise development of resources. A thermal developer in Mono County would direct inquiries to the headquarters office for District No. 1, located in Sacramento. On federal lands the developer would also require a permit from the Bureau of Land Management or the U.S. Forest Service. Other permits would be required from the Great Basin Air Pollution Control District, the Department of Health, the Department of Fish and Game, the Lahontan Regional Water Quality Control Board, and (on state lands) the State Lands Commission.

CALIFORNIA DEPARTMENT OF CONSERVATION, OFFICE OF MINE RECLAMATION [www.consrv.ca.gov/omr]

The Office of Mine Reclamation oversees mine reclamation activities and reviews Reclamation Plans for mines in the county.

CALIFORNIA DEPARTMENT OF FIRE AND FORESTRY (CDF) [www.fire.ca.gov]

The CDF is responsible for wildland fire prevention and suppression on private lands in Mono County. The Department is responsible for overseeing implementation of the Firesafe Regulations (Chapter 22 of the Mono County Land Development Regulations).

CALIFORNIA DEPARTMENT OF FISH AND GAME [www.dfg.ca.gov]

The California Department of Fish and Game (DFG) has the authority to regulate any alteration of "the natural flow or ... the bed, channel or bank of any river, stream or lake designated by the department." Prior to development, developers must obtain a Streambed Alteration Permit from DFG. The Department analyzes these applications based on the impact of the requested alteration on fish and wildlife resources and may suggest mitigation measures, if necessary, to protect the resource.

The Department also administers the California Endangered Species Act, adopted by the California Legislature to conserve, protect, restore and enhance endangered or threatened ("special status") species. The Act prohibits the state or state agencies from approving projects

that would jeopardize the continued existence of any endangered or threatened species or destroy critical habitat of such species, unless overriding factors are present, or if reasonable alternatives to the project were available that would prevent such jeopardy. Mitigation and enhancement measures may be incorporated into a project to avoid a finding of jeopardy. The DFG's website provides access to a variety of information relating to wildlife and habitat conservation including information on wetlands, deer habitat, streambed alteration, and the California Natural Diversity Database (CNDDB), that provides information on special-status species.

Lead agencies are required to consult with the DFG and to obtain written findings when preparing an EIR in order to determine the impact of a project on a threatened species. If the DFG determines that jeopardy will result from a project, the DFG must advise the lead agency of reasonable and prudent alternatives to the project. If the recommended alternatives are infeasible, the lead agency may still approve a project if it (1) requires mitigation and enhancement; (2) the benefits clearly outweigh the benefits of the recommended alternatives; (3) no irreversible or irretrievable commitment of resources has been made; and (4) a project will not result in likely extinction of the species.

The DFG administers some public lands in Mono County for wildlife habitat and implements its deer herd management plans throughout the county.

CALIFORNIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

[\[www.hcd.ca.gov\]](http://www.hcd.ca.gov)

The California Department of Housing and Community Development is responsible for:

- Administering state and federal housing finance, rehabilitation and economic development programs;
- Promoting the development of housing policies and programs, including the administration of Housing Element law and the development of information on housing need and availability;
- Analyzing, enforcing and participating in the development of building codes, manufactured housing standards, and mobile-home park and employee housing regulations.

CALIFORNIA DEPARTMENT OF PARKS AND RECREATION [\[www.cal-parks.ca.gov\]](http://www.cal-parks.ca.gov)

The California Department of Parks and Recreation maintains and administers two units of the California State Park System in Mono County. The Mono Lake Tufa State Reserve encompasses approximately 17,000 acres; Bodie State Historic Park contains approximately 495 acres. Each has nearly 200,000 visitors annually. These units provide cultural and natural features not available elsewhere in the State Park System. The Bodie State Historic Park Resource Management Plan, General Development Plan and EIR, adopted in 1979, serves as the guide for park use, maintenance and interpretation. The Department has yet to prepare a management plan for the Mono Lake Tufa State Reserve. The Department's website provides information about the state parks and links to Bodie SHP and the Mono Lake Tufa SR.

CALIFORNIA DEPARTMENT OF TRANSPORTATION [\[www.dot.ca.gov\]](http://www.dot.ca.gov); Bishop District 9 office — www.dot.ca.gov/dist9/

Caltrans develops policies and programs related to the development of state and federal highways in the county, maintains those highways and comments on the potential impacts of projects on the highway system. Staff from Caltrans District 9 office works with the Mono County Local Transportation Commission to update the County's Regional Transportation Plan and to implement state and local transportation plans and policies.

GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT (GBUAPCD) [California Air Resources Board — arbis.arb.ca.gov; GBUAPCD not online]

The California Air Resources Board (ARB) regulates mobile sources of air pollutants and coordinates and oversees the activities of the State's regional air quality agencies. The ARB and the regional air quality agencies operate a number of air quality monitoring stations throughout the state. Data collected at these stations are used by ARB to classify areas as "attainment" or "non-attainment" with respect to the federal standards. The ARB also establishes state ambient air quality standards and state emission standards for new vehicles, which in many cases are more stringent than the federal standards. In California, the more stringent of the federal and state standards applies; however, current air quality planning activities are focused on federal ambient air quality standards.

Mono County is under the jurisdiction of the Great Basin Unified Air Pollution Control District (GBUAPCD). As the regional air quality agency, the GBUAPCD is responsible for the development of "non-attainment plans" and has primary responsibility for regulating air pollutant emissions from stationary sources. By authority of its permitting power, the GBUAPCD can impose conditions on new or modified stationary sources. In addition, the GBUAPCD has established secondary source permitting requirements for such developments as ski areas, restaurants, hotels and parking structures that attract substantial motor vehicle traffic. The GBUAPCD has adopted a PM₁₀ (10 micron particulate matter) non-attainment plan for the town of Mammoth Lakes and an ozone non-attainment plan for the entire county.

LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD (LRWQCB) [State Water Resources Control Board — www.swrcb.ca.gov; LRWQCB — www.mscomm.com/~rwqcb6/]

The Lahontan Regional Water Quality Control Board (RWQCB) has jurisdiction over water quality in Mono County. The North and South Lahontan Basin Plans address water quality issues in Mono County. The boundary between the North and South Lahontan basins is shown in Figure 3.

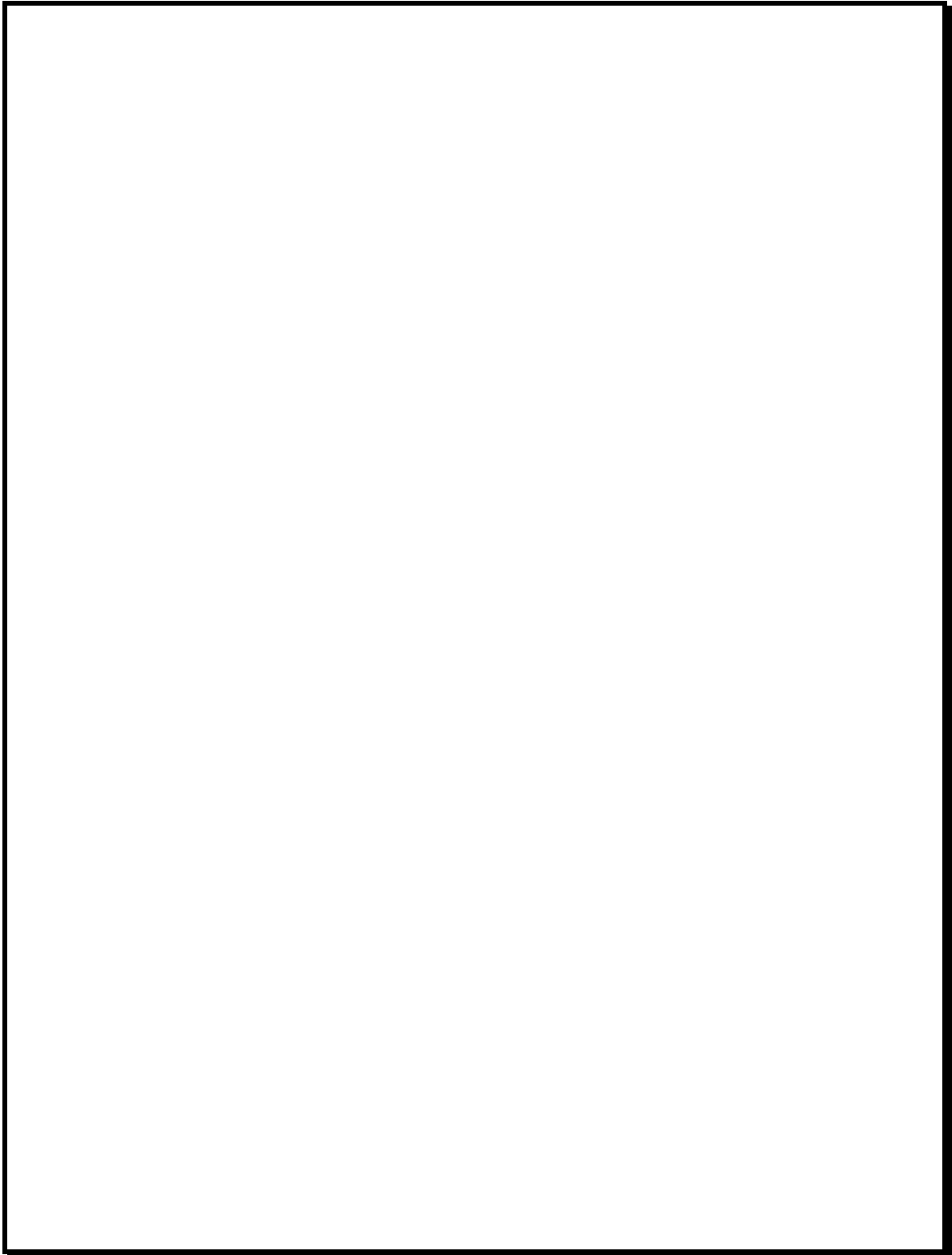
The plans specify actions to preserve and enhance water quality and protect beneficial uses for the maximum benefit of the people of the state of California. They specifically consider the unique physical, economic and social conditions of the basins in developing the best practicable water quality management scheme.

The Lahontan RWQCB also administers the National Pollution Discharge Elimination System Permit (NPDES) that applies if more than five acres of site disturbance will occur. For development in areas with wetlands, the LRWQCB administers the 401 permit process.

STATE LANDS COMMISSION [www.slc.ca.gov]

Property owned by the State of California in Mono County includes the "School Lands." When California became a state, sections 16 and 36 of each township were deeded to the State by the federal government to be used for the support of public schools. The State Lands Commission does not have land management plans for its desert holdings because it is not considered feasible to implement plans on isolated sections of land. The Planning Unit in the State Lands Commission responds to planning issues on a case-by-case basis during the EIS/EIR-review stage. Current policy is to seek consolidation of State School Lands by trading, usually with the U.S. Forest Service or the Bureau of Land Management (Shimer, 1986).

FIGURE 3
LAHONTAN DRAINAGE BASINS & HYDROLOGIC UNITS



FEDERAL AGENCY PLANS AND POLICIES

BUREAU OF INDIAN AFFAIRS (BIA) [www.doi.gov/bureau-indian-affairs]

In 1990, there were approximately 340 Native Americans in Mono County (1990 Census). About 75% belong to federally recognized tribes or communities and live on or near reservations.

Federally recognized tribes in Mono County include the following (SNEP, Vol. II, Ch. 10):

Utu Utu Gwaitu Paiute Benton Paiute Reservation

Population: 82

Land Base: 410 acres

Executive Order July 22, 1915 recognized the tribe. The tribe purchased 2.5 acres of land using HUD grant funds on August 24, 1984. Two hundred and fifty acres of land were transferred to the tribe from adjacent BLM lands through administrative order of the Secretary of the Interior in 1995.

Bridgeport Paiute Indian Colony Bridgeport Rancheria

Population: 53 on the reservation, 26 adjacent

Land Base: 80 acres

Public Law 93-451 established rancheria October 18, 1974. Forty-one acres of adjacent BLM land were transferred through administrative order of the Secretary of the Interior in 1995.

The **Mono Lake Indian Community of Lee Vining** was seeking federal recognition as of 1995.

"Tribal governments, Indian communities and individual Indian people must be considered separately from the general population under a suite of federal and state laws dealing with environmental analysis, religious freedom, archaeological sites and protection of Native American human remains. Because federally recognized Indian tribes have a government-to-government relationship with the United States, they are not subject to state or county jurisdiction in most matters. Federal laws, such as NEPA, apply to land held in fee-simple title by Native Americans, but not necessarily to lands held in trust for a tribe by the federal government" (SNEP, Vol. II, Ch. 10).

The Bureau of Indian Affairs (BIA) is the federal agency with primary responsibility for working with Native American tribal governments. Other federal agencies may deal with native peoples as members of an ethnic group or simply as individuals; the BIA deals with native communities as governments.

The primary goal of the BIA, under a U.S. policy of self-determination, is to encourage and support tribal self-governing efforts and to provide needed programs and services on the reservations. One of the principal programs of the BIA is administering and managing land held in trust by the United States for Native Americans. Developing forest lands, leasing mineral rights, directing agricultural programs and protecting water and land rights are included in this responsibility. Tribal governments also hold some decision-making roles in land use.

BUREAU OF LAND MANAGEMENT (BLM) [www.blm.gov; www.ca.blm.gov (California office); www.ca.blm.gov/bishop (Bishop office)]

The Bureau of Land Management manages 554,215 acres within Mono County. BLM boundaries are shown in Figure 4. The Resource Management Plan (RMP) for the Bishop Resource Area includes BLM lands in Mono County west of the White Mountains. The plan focuses on four issues—recreation, wildlife, minerals, and land ownership and authorizations—and addresses several additional concerns including cultural resources, fuelwood harvesting, livestock grazing and fire suppression. The overall purpose of the plan is to develop the best estimate of multiple use management for BLM lands.

NATURAL RESOURCES CONSERVATION SERVICE [www.nrcs.usda.gov]

The Natural Resources Conservation Service (formerly the Soil Conservation Service) is responsible for a variety of programs to assist people with conservation needs, including the following:

- Soil Survey Program;
- Watershed Surveys and Planning;
- Watershed Protection and Flood Prevention Operations;
- Grazing Lands Conservation Program;
- Wetlands Reserve Program; and
- Resource Conservation and Development.

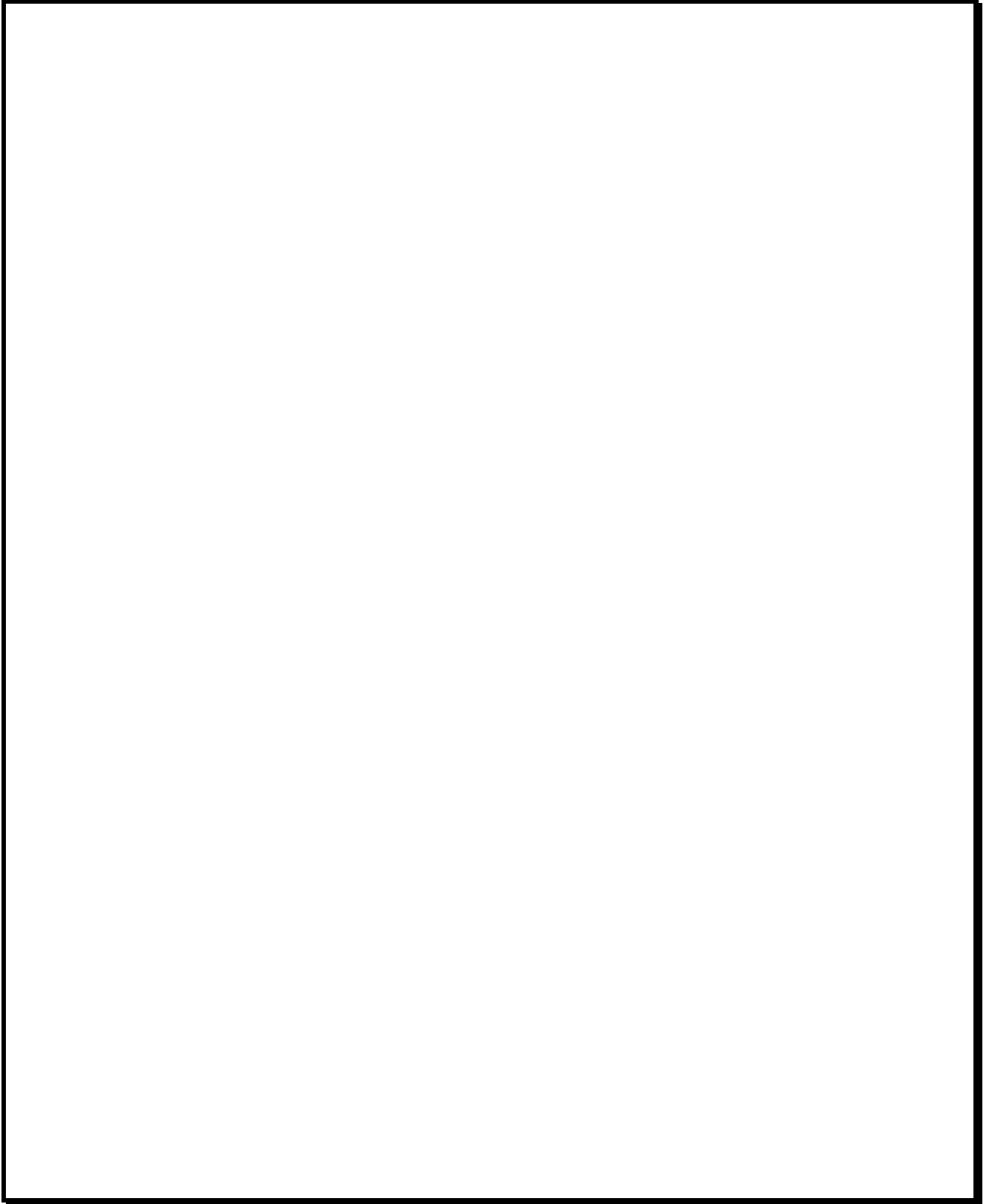
U.S. ARMY CORPS OF ENGINEERS [www.usace.army.mil/]

A U.S. Army Corps of Engineers Section 404 (Clean Water Act) permit, often called a "404" permit, must be obtained by any person or public agency proposing to discharge dredged or fill material into waters of the United States, including wetlands. Fill material can include sand, gravel, dirt, clay and stone.

The River and Harbor Act of 1899 (Section 10) gives the Corps permit power over activities in navigable waters. Typical activities that require Section 10 permits include artificial canals, artificial islands, beach nourishment, boat ramps, breakwaters, bulkheads, dams, dikes and weirs. Navigable waters originally were defined as those suitable for commercial transport. Court decisions have widened the definition of navigable waters and have expanded the Corps' regulatory jurisdiction. "Navigable waters" now include rivers, adjacent wetlands, lakes and intermittent streams that, under specified conditions, are tributary to navigable waters.

A public or private landowner in Mono County who suspects that wetlands may occur on a site proposed for development should obtain a determination from the appropriate District Office of the Corps regarding the extent of "jurisdictional" wetlands on the property. The Corps evaluates projects by weighing the economic benefit of the proposal against any adverse impacts. The analysis involves a broad range of issues including public safety, water quality, land use impacts, historical value, and conservation and wildlife. Projects proposed in certain wetland areas, but are not water dependent, may be subject to an extensive alternatives analysis before being approved or rejected. The current nationwide policy of no net loss of wetlands is being rigorously implemented by the Corps and commenting agencies.

FIGURE 4
LAND OWNERSHIP/JURISDICTIONAL BOUNDARIES



U.S. FISH AND WILDLIFE SERVICE [www.fws.gov]

The Fish and Wildlife Coordination Act calls for consultation from U.S. Fish and Wildlife Service (USFWS) regarding impacts on migratory birds, wetlands, and other fish and wildlife resources from federally funded or permitted projects that may affect streams and water bodies, such as those permitted under Section 404 and Section 10. The Federal Endangered Species Act, like the California Act, protects plant, fish and wildlife species and their habitats, listed as threatened or endangered, and determines critical habitats for such species. Consultation is required on both private and public projects to determine whether the continued existence of the affected species will be jeopardized.

U.S. FOREST SERVICE-- HUMBOLDT-TOIYABE NATIONAL FOREST [www.fs.fed.us/htnf]

The Humboldt-Toiyabe National Forest contains 381,350 acres within Mono County. Its boundaries are shown on Figure 4. These lands are managed in accordance with the Toiyabe National Forest Land and Resource Management Plan (LRMP), adopted in 1986. The Toiyabe National Forest LRMP:

1. Establishes management direction for the Toiyabe National Forest;
2. Evaluates existing conditions in the forest and identifies issues, concerns and opportunities;
3. Specifies qualitative and quantitative standards and guidelines and approximate timing and location of actions necessary to achieve management direction;
4. Sets monitoring and evaluation requirements to measure progress toward goals; and
5. Creates multi-year implementation programs based on the plan that are translated into multi-year budget proposals.

The Humboldt-Toiyabe Forest is divided into 12 management areas. Each area is composed of contiguous lands with similar topography, geology and land and resource uses. The LRMP contains a description of each management area, the management directive and activities and specific standards and guidelines that apply to each area. All or part of the following management areas are within Mono County:

Alpine	Walker	Bridgeport Pinon-Juniper	Existing Wilderness
--------	--------	--------------------------	---------------------

U.S. FOREST SERVICE -- INYO NATIONAL FOREST [www.r5.pswfs.gov/inyo]

The Inyo National Forest contains 814,592 acres within Mono County. Its boundaries are shown on Figure 4. These lands are managed in accordance with the Inyo National Forest Land and Resource Management Plan (LRMP), adopted in 1988. The Inyo LRMP is organized in a format similar to that used by the Toiyabe LRMP.

All or part of the following management areas on the Inyo National Forest are included within Mono County:

Mono Basin	Mammoth Escarpment	Upper Owens River	Glass Mountain
Lee Vining	Mammoth	Rock Creek /Pine Creek	Benton/Casa Diablo
Walker-Parker	Red's Meadow-Fish Creek	Pizona	
June Lake Loop	Convict /McGee	White Mountains	

CHAPTER 3

LAND USE*

SETTING

Mono County is located on the eastern slope of the Sierra Nevada, south of Lake Tahoe. The county is a long, narrow strip of land—108 miles at its greatest length and 38 miles in average width—bounded to the west by the Sierra crest and to the east by the Nevada state line. Although there are several mountain ranges in and adjacent to the county, the Sierra Nevada dominates the landscape—the predominant feeling throughout the county is one of space and panoramic views opening eastward from the Sierra.

Human use and development of the area has been influenced by its isolation and the difficulty of access. Access remains limited to one main transportation route, U.S. Highway 395, which runs through the county along the foot of the Sierra for approximately 120 miles. By car, Los Angeles is approximately 350 miles south on U.S. 395, Reno, Nevada, is 160 miles north on U.S. 395, and the San Francisco Bay Area is approximately 300-350 miles west on various routes connecting to U.S. 395. Two highways, State Route 167 and U.S. Highway 6, provide access to Nevada from the central and southern portions of the county. Access both to the east and the west may be closed in winter due to snow—U.S. 395 then becomes the only access to and through the county.

Mono County is rural and sparsely settled, with 9,956 residents in the 1990 Census. One half of the county's population (4,785 people in 1990) lives in the town of Mammoth Lakes, the only incorporated community in the county. The remainder of the population lives in a number of small communities scattered throughout the county. Approximately 94% of the land in the county is publicly owned; the Forest Service and the Bureau of Land Management manage much of it. The Los Angeles Department of Water and Power also owns large parcels of land in the southern portion of the county.

LAND OWNERSHIP PATTERNS

Land use within the unincorporated area of Mono County is highly constrained by land ownership. Approximately 94% of the land in the county is publicly owned; 88% is federally owned and the State, the Los Angeles Department of Water and Power, or Native American tribal groups own the remainder. Most private lands within the county are concentrated in community areas, with the remainder dispersed throughout the county in small parcels. Within existing community boundaries, some communities have limited land available for additional development; expansion of some communities beyond existing boundaries is limited by the public ownership of surrounding lands. Development of new communities throughout the county is limited by the lack of large concentrations of private lands outside existing communities; those parcels of private land that are large enough for development are in many cases agricultural lands and are not available for development.

Land use planning in the county is fragmented due to the pattern of land ownership. The federal land management agencies have planning authority on federal lands; the Town has planning authority for the incorporated area; and state agencies have planning authority on state lands.

*Refer also to the section on "Plans and Policies" for cross-references to other documents that may provide additional site-specific land use information.

TABLE 1 LAND OWNERSHIP

	<u>Acres</u>	<u>Square Miles</u>	<u>Percent</u>
Inyo National Forest	814,592	1,273	41
Humboldt-Toiyabe National Forest	381,350	596	19
Bureau of Land Management	554,215	866	28
Los Angeles Department of Water and Power State	62,678	98	3
(State School Lands, DFG Lands, State Parks) ^a	42,412	66	2
County	507	.8	<1
Private--Town of Mammoth Lakes	2,200	3	<1
Private--Unincorporated	127,996	200	6
TOTAL Area	1,985,950	3,103	100^b

NOTES: Acreage figures are current as of April 1992.

Total area in the county is 3,103 square miles (1,985,950 acres). Land area is 3,028 square miles (1,937,920 acres); water area is 75 square miles (48,030 acres)

a. State School Lands Acreage = 9,178; DFG Acreage = 15,739; State Parks Acreage = 17,495 (Bodie State Historic Park = 495, Mono Lake Tufa State Reserve = 17,000)

b. May not add to 100% due to rounding.

The County has only limited environmental authority on the federally owned lands managed by the Forest Service and the BLM; for minerals development, the County is the lead agency for compliance with the requirements of SMARA. The County has planning authority on DWP lands, and any development on those lands must comply with CEQA and the County's environmental review process. Development on DWP lands is a key issue since much of the land that DWP owns is environmentally sensitive; e.g., wetlands and critical wildlife habitat.

Since the County has direct planning authority over only a small percentage of the lands in the county, it must work with other land managers to manage the natural resources in the area in a coordinated and standardized manner, and to conserve natural resources while at the same time providing for community needs. Although the Land Use Element assigns land use designations to all of the land within its planning area, the focus of the planning effort is the privately owned unincorporated lands within the county. Land use designations have been developed to reflect federal land use designations and to complement the land use designations used by the Town of Mammoth Lakes.

EXISTING LAND USE

Land ownership, along with topography and other natural characteristics of the area, dictates land use patterns in Mono County. Since 94% of the land in the county is publicly owned, much of the land remains open space and is used for a variety of purposes.

A general pattern of development recurs throughout the county; residential and commercial uses are concentrated in small communities located in the valleys, the valley floors are used for grazing and croplands, mining occurs in the mountains, and recreational uses are dispersed throughout the county. Most of the development in the county is low density; the most intense development occurs in the town of Mammoth Lakes.

Outside of community areas, private lands are used for mining, grazing, resort and recreational developments. There is some residential development on private lands in the Devil's Gate-Swauger Creek area. Elsewhere in the county, residential developments have been proposed for large parcels of privately owned land such as Conway Ranch. Currently, no development has occurred at these sites.

Public lands throughout the county are used for a variety of recreational uses, including fishing, hunting, camping, alpine skiing, Nordic skiing, off-road vehicle use, snowmobiling, hiking, horseback riding, biking and sightseeing. The County operates several campgrounds and parks in addition to those operated by the Forest Service and the BLM. Figure 5 shows the location of these facilities (see Appendix A). Public lands in some areas are also used for livestock grazing, timber production, fuelwood cutting and mining.

COMMUNITY LAND USE

The following section outlines existing land use in each of the community areas and discusses environmental constraints that may affect the development potential of private lands in each of those areas. Some environmental constraints, such as the presence of cultural resources, have not yet been as well identified. They may become more evident as the development potential of specific sites is studied. Maps showing the environmental constraints discussed below are included in other sections of this document.

Antelope Valley



West Walker River in the Antelope Valley.

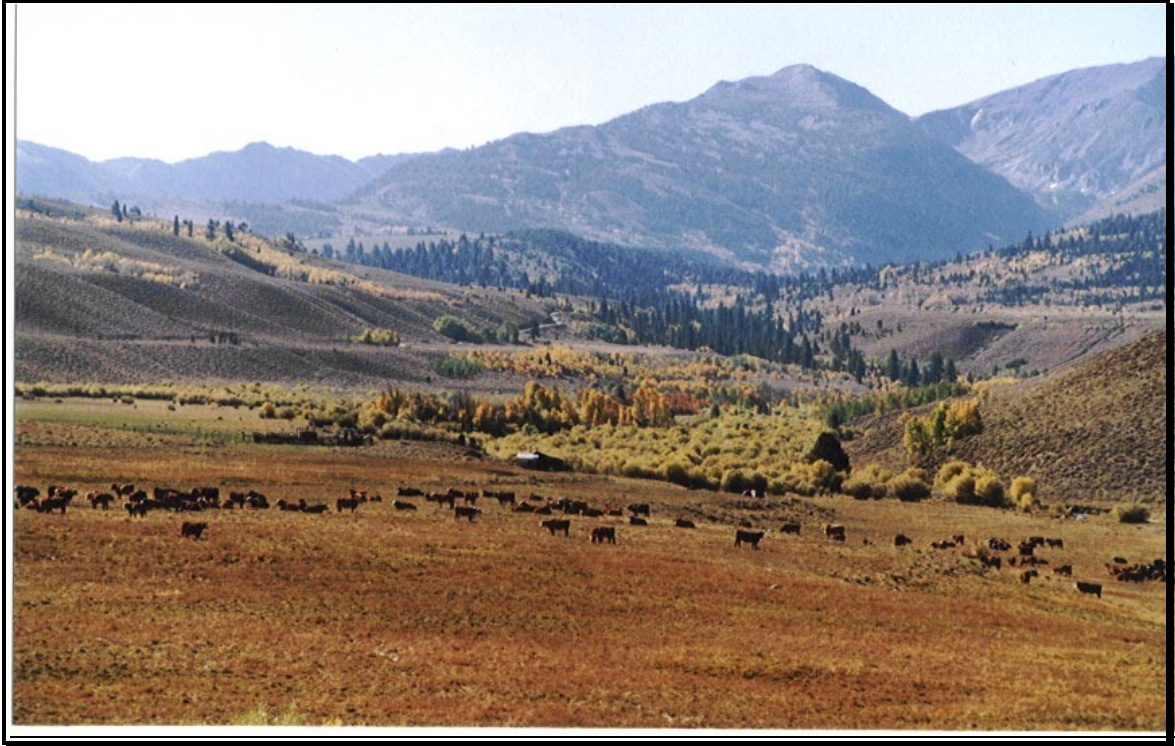
The Antelope Valley is located at the northern end of the county. The West Walker River flows through the valley floor to Topaz Lake, a man-made reservoir straddling the California-Nevada state line. The river is diverted for irrigation purposes throughout the valley; most of the valley floor is used for agriculture, livestock grazing and alfalfa growing. The valley includes the communities of Walker, Coleville and Topaz.

Land use within the communities is predominantly residential, with some limited commercial and lodging development and scattered public uses. The community of Walker includes residential uses, a county roadyard, a few lodges and restaurants, limited commercial development, a county landfill (on BLM land), a county park, community center and ball fields. Coleville includes residential uses, a high school, a privately operated cemetery, a branch library and housing for the U.S. Marine Corps facility at Pickel Meadow. Land use in Topaz is primarily residential. Sewer and water services throughout the valley are provided by individual wells and septic systems. The Antelope Fire Protection District provides fire protection.

Development in the valley may be affected by the presence of shallow groundwater throughout the valley, the existence of a groundwater basin and recharge zone in the area, the presence of fault-rupture hazard zones (Alquist-Priolo zones) along the west side of the valley, the existence

of deer migration zones and habitat in the area, and the presence of flood zones throughout the valley.

Swauger Creek, Devil's Gate



View from U.S. 395 near Sonora Junction.

The Swauger Creek/Devil's Gate planning area includes 5,200 acres of privately owned land located between Bridgeport and Walker Canyon. The area is generally characterized by steep mountainous terrain, foothills of more moderate grade, and wet meadow lowland areas throughout the Swauger watershed. Scenic vistas are abundant throughout the planning area, and the environment is the principal summer range for the Walker deer herd. The area is currently undergoing a change in use from traditional agricultural and public recreation to residential development. Single-family residential development is the primary land use in the area.

Bridgeport Valley



Agricultural lands in Bridgeport Valley.

The community of Bridgeport is located at the northern end of the Bridgeport Valley, adjacent to the Bridgeport Reservoir. Land use within Bridgeport includes residential and commercial uses, an elementary school, Mono General Hospital, the Bridgeport museum, a county park, community center and ball fields, the county government offices, the county jail, a county roadway and maintenance facilities, a county landfill (on BLM land), an airport, a county-operated cemetery, the Bridgeport Quarry materials pit (on BLM land), and the USFS Bridgeport Ranger District offices. Water and sewer services are provided to most of the community by the Bridgeport Public Utility District (PUD). Development outside the PUD is served by individual wells and septic systems. The Bridgeport Fire Protection District provides fire protection.

The Bridgeport Valley is irrigated pastureland and is heavily used for grazing livestock; several ranches are located in the valley. The East Walker River is diverted for irrigation as it flows through the valley. Twin Lakes at the south end of the valley has been developed as a resort and second-home area. Development on private lands at Twin Lakes has been curtailed by recent changes in Lahontan's requirements for septic installations.

Development in the Bridgeport Valley may be affected by the presence of shallow groundwater throughout the valley, by wetlands, by the existence of a groundwater basin and recharge zone in the area, by the presence of fault-rupture hazard zones (Alquist-Priolo zones) throughout the

valley, and by the presence of flood zones at Twin Lakes, Bridgeport Reservoir, and throughout the valley.

Mono Basin



Downtown Lee Vining.

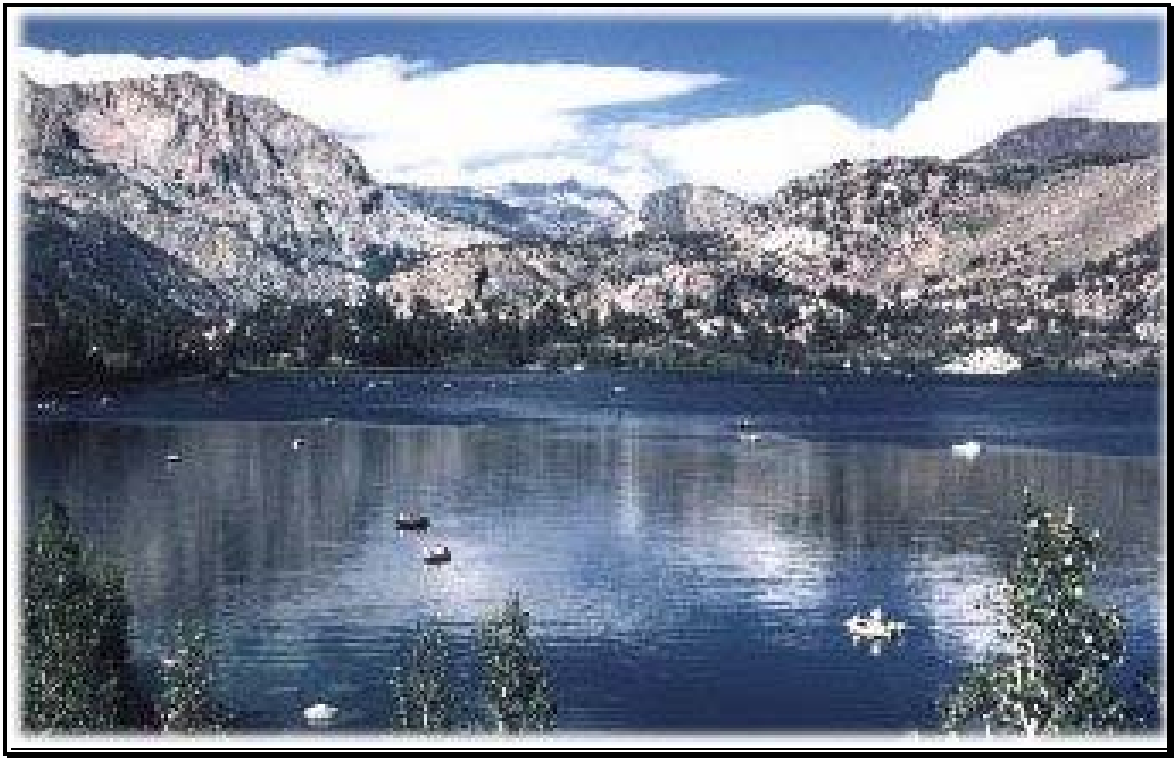
Mono Basin includes the communities of Lee Vining and Mono City. Mono City is a residential subdivision located north of Mono Lake, adjacent to the boundaries of the Mono Basin National Forest Scenic Area. Water for Mono City is provided by a community water system; sewer is provided by individual septic systems. The Mono City Fire Protection District provides fire protection. The Black Point Cinder Mine is located southeast of Mono City, on Forest Service land on the north shore of Mono Lake.

Lee Vining is located on U.S. Highway 395 at the southwest corner of Mono Lake. The community includes residential areas, an elementary school, a high school, a county park, a museum, a roadyards for Caltrans and the County, several lodging facilities and restaurants, limited commercial development, and the USFS Mono Basin Visitor Center. The USFS Mono Basin Ranger District Office is located just south of the community in Lee Vining Canyon. The Lee Vining Public Utility District provides water and sewer services; fire protection is provided by the Lee Vining Fire Protection District.

South of Mono Lake and Lee Vining, the Los Angeles Department of Water and Power (DWP) owns large parcels of land. Much of this land is leased for grazing. The county's Pumice Valley landfill is located on DWP land in this area. There are also three materials pits in this area; the Marzano and Hunewill pits are located on DWP land, the Horse Meadows pit is located on Forest Service land.

Development in the Mono Basin region may be affected by the presence of a number of special-status species and special habitats in the area, use of the area by mule deer for summer range and migration corridors, the existence of a fault-rupture hazard zone (Alquist-Priolo zone) running along the foot of the Sierra and through Lee Vining, and the presence of a flood zone along Lee Vining Creek. Development of private lands within the Mono Basin National Forest Scenic Area is governed by the Private Land Development Guidelines, which are a part of the Comprehensive Management Plan for the area.

June Lake



June Lake.

The community of June Lake includes a commercial core in the Village, residential areas in the Village and Down Canyon areas, a county park and community center, lodging facilities, June Mountain Ski Area, limited light industrial uses (small woodlots, equipment storage areas, and a gravel pit), and resort development. There is heavy recreational use throughout the area. The June Lake Public Utility District provides water and sewer services to the Village and Down Canyon areas; the June Lake Fire Protection District provides fire protection. State Route 158 is the only access to the community; it forms a loop, connecting with U.S. Highway 395 at the June Lake Junction and several miles farther north near Grant Lake.

Development in the June Lake area may be affected by the presence of a groundwater basin in the area, use of the area by mule deer and the presence of migration corridors in the area, the presence of wetlands, especially in the Down Canyon area, the presence of fault-rupture hazard zones (Alquist-Priolo zones) in the area, the presence of high-risk rockfall and landslide areas, the identification of avalanche-prone areas, and the existence of flood zones.

Mammoth Vicinity, Upper Owens



Mammoth Mountain.

The Mammoth vicinity area includes the town of Mammoth Lakes, the private lands along the Upper Owens River, and the area of Long Valley west of Crowley Lake. The Town has a mix of uses including residential, commercial, industrial and recreational; the Town of Mammoth Lakes General Plan and the Inyo National Forest Land and Resource Management Plan provide planning for those uses.

Outside the town, land use in the area includes the geothermal development at Casa Diablo, Hot Creek Fish Hatchery, Hot Creek Ranch, the Mammoth/Yosemite Airport, the Sierra Quarry materials pit, the USFS materials pit just north of the airport, a kaolin mine, the Sierra Nevada Aquatic Research Laboratory (SNARL), the Benton Crossing landfill (on DWP land), recreational facilities on DWP land at Whitmore Springs, the animal shelter at Whitmore Springs, recreational facilities on DWP land at Benton Crossing, and a cattle ranch and three fly fishing ranches along the Upper Owens River. Landowners along the Upper Owens River have developed land use

policies for that area. DWP owns large parcels of land adjacent to Crowley Lake; much of this land is leased for grazing.

Development in the Mammoth vicinity may be affected by the presence of shallow groundwater in the area, the identification of a groundwater basin and recharge zone in the area west of Crowley Lake, the identification of a number of special-status species and special habitats in the area, heavy use of the area by wildlife, including mule deer, sage grouse and waterfowl, wetlands, the presence of fault-rupture hazard zones (Alquist-Priolo zones) and high-risk ground failure areas throughout the area, and the identification of a flood zone along Hot Creek.

Long Valley



The Long Valley area.

The Long Valley area includes the communities of Long Valley, McGee Creek, Hilton Creek/Crowley Lake, Aspen Springs, Tom's Place and Sunny Slopes. These communities are primarily residential with some limited commercial development at Hilton Creek and at Tom's Place. The Hilton Creek Community Services District provides sewer service to the Hilton Creek area; elsewhere, individual septic systems are in use. Water is provided by a mutual water company, by individual wells, and in Sunny Slopes, by the Birchim Community Services District. The Long Valley Fire Protection District provides fire protection throughout the area.

Development in this area may be affected by the presence of shallow groundwater and a groundwater basin and recharge zone in the area south of Crowley Lake, wetlands, the identification of several special-status species and special habitats in the area, the identification of wildlife habitat in the area, and the identification of avalanche-prone areas.

Wheeler Crest



The Wheeler Crest area.

The Wheeler Crest area includes development at Swall Meadows and Pinon Ranch. All development in this area is residential; most of the area is served by individual wells and septic systems. The Wheeler Crest Community Services District operates a community well for the Hilltop Estates and Pinon Ranch subdivisions. The Wheeler Crest Fire Protection District provides fire protection throughout the area.

Environmental constraints to development in this area include the presence of a groundwater basin, use of the area as a deer migration corridor and critical winter range, and identification of fault-rupture hazard zones (Alquist-Priolo zone) and avalanche-prone areas.

Paradise



The Paradise area.

Paradise is a residential development at the southern end of the county. There is one commercial lodging facility in the area. All the development in the area is served by individual wells and septic systems. The Paradise Fire Protection District provides fire protection. The county maintains a trash container south of Paradise for use by residents of Wheeler Crest and Paradise; full containers are hauled to the Benton Crossing landfill once per week.

Development constraints in this area include the use of the area as a deer migration corridor and critical winter range.

Benton, Hammil, Chalfant



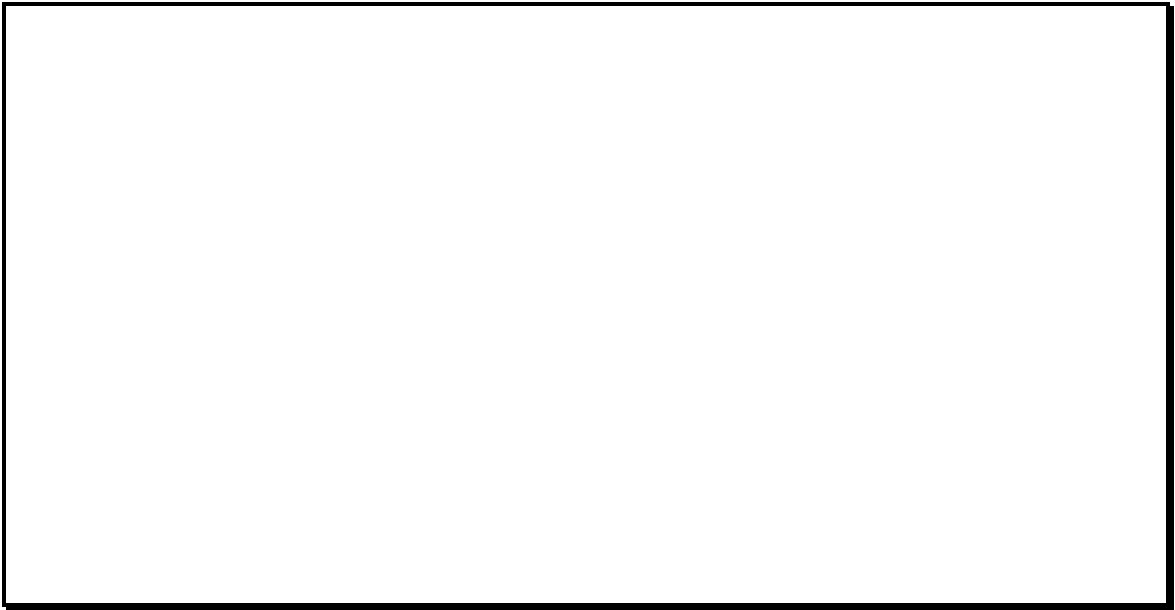
The Tri-Valley area.

The Tri-Valley area contains the communities of Benton, Hammil and Chalfant. The predominant land uses throughout the Tri-Valley area are residential and agricultural. In addition to residential development, Benton and Chalfant each contain a small store and community facilities, including a county park and ball fields and a county landfill on land leased from the BLM. Benton also has an elementary school. Large parcels of land throughout the Tri-Valley area, especially in Hammil Valley, are used for agriculture. In the past, alfalfa has been the primary crop. Other crops are now being grown, including seed potatoes, garlic and carrots.

All development in the area is served by individual wells and septic systems. The White Mountain Fire Protection District provides by the Chalfant Valley Fire Department, and in Hammil and Benton fire protection in the Chalfant area.

Development in the area may be affected by the presence of a groundwater basin under the entire area and identification of a recharge zone along the foot of the White Mountains east of Highway 6, the identification of a shallow groundwater zone at Benton Hot Springs, the presence of wetlands at Benton Hot Springs, the identification of several special-status species and special habitats in the area, the identification of mule deer habitat in the Benton area, the identification of debris flow hazards throughout the valley, and the existence of flood hazards throughout the valleys.

Oasis



The Oasis area.

Oasis is located in the extreme southeastern corner of the county and is isolated from the rest of the county by the White Mountains. Access is either from Nevada or via State Route 168 from Big Pine in Inyo County. The area is used for agricultural production, primarily alfalfa.

TIMBER LANDS

Although timber harvesting occurs in Mono County, timber is not an extensively developed resource. Mono County has been assessed by the California State Board of Equalization as a county where growing timber is not the highest and best use of the natural resource. Therefore, Mono County has no areas designated as timber production zones (TPZs—areas where lands is taxed on a use-valuation basis with its usage limited to growing and harvesting timber and compatible uses) (Tosta, 1988; California Statistical Abstract 2000, Table G-29). Productive forests do exist in Mono County, but they represent less than 10% of the total land area in the county (USFS, 1986). In 1998, 4.8 million board feet of timber was produced in Mono County, less than 1% of the 2.1 billion board feet produced statewide that year (California Statistical Abstract 2000, Table G-27).

Approximately 94% of the county's productive timber area lies within National Forest boundaries. In 1999, there were 183,000 acres of commercial forestland in Mono County. Of that total, 172,000 acres were public lands managed by the U.S. Forest Service, 7,000 acres were managed by a public agency other than the Forest Service, and 4,000 acres were privately owned (California Statistical Abstract 2000, Table G-29). The forest resource in the county is used extensively for fuelwood cutting, both by commercial operations and individuals.

AGRICULTURAL LANDS

The 1997 Census of Agriculture reported that there were 63 farms¹ in the county, a decrease of 13 from the total of 76 farms reported in the 1987 Census of Agriculture (information on agricultural production is from the California Statistical Abstract, 1990 and 2000 editions, and the California Department of Food and Agriculture [www.cdffa.ca.gov]). Average farm size in 1997 was 1,092 acres, an increase of 133 acres from the 1987 average farm size of 959 acres. Total farmland acreage decreased from 72,900 acres in 1987 to 68,813 acres in 1997; total cropland harvested decreased from 8,871 acres to 8,462 acres during the same period.

The value of Mono County agricultural production in 1997 was \$18.3 million; in 1989, it was \$13.3 million. In 1997, cattle and calves accounted for \$7.03 million (\$5.3 million in 1989), hay and alfalfa for \$4.62 million (alfalfa alone —\$4.1 million in 1989), carrots for \$2.05 million (not listed separately in 1989), seed crops for \$1.55 million (not listed separately in 1989), and sheep and lambs for \$1.44 million (\$1.2 million in 1989). In 1989, irrigated pasture, hay, wool and other crops accounted for 2.7 million.

¹ The Census defines a "farm" as any place from which \$1,000 or more of agricultural products were sold, or normally would have been sold, during the Census year.

Large portions of the privately owned land in the county are used for agriculture. The majority of cropland in the county is used for cultivation of alfalfa; however, there has been a steady increase in the production of other crops, including potatoes, beans, a virus-free strain of garlic, and recently, carrots. Garlic crops are located near Topaz Lake and in the Hammil/Chalfant area (Milovich, 1988). Carrots have replaced alfalfa in many parts of the Hammil and Benton valleys.

The Farmland Mapping and Monitoring Program under the jurisdiction of the Department of Conservation is developing maps classifying the value of farmlands. Prime farmland is defined as "land that has the best combination of physical and chemical characteristics for the production of crops." There are numerous specific criteria relating to water availability, water table, soil chemistry, flooding, erodibility, and physical soil characteristics that must be met for land to be considered Prime Farmland. The Soil Conservation Service (SCS—now part of the National Resource Conservation Service, NRCS) has mapped most of these characteristics for Mono County, but Mono County has not yet been included in the Farmland Mapping and Monitoring (Farmland Mapping and Monitoring Program, 2001. See www.consrv.ca.gov/dlrp/FMMP).

RANGELANDS

Grazing for cattle and sheep on irrigated and non-irrigated pastureland is the major use of rangeland. Grazing occurs on private lands and leased public lands. Livestock numbers have been reduced in recent years as the continuing drought lessens available forage. Range carrying capacities dropped 35% to 40% below normal between 1986 and 1990.

ZONING

The Mono County Land Development Regulations (included as a separate chapter of the Land Use Element of the Mono County General Plan) and the Subdivision and Land Division Code (Title 17 of the Mono County Code) implement the General Plan and Area Plans. The Land Development Regulations have been integrated with the Land Use Element to ensure consistency between those regulations and General Plan policies.

BUILDOUT AND SUSTAINABLE DEVELOPMENT

The following discussion is an excerpt from the Status of the Sierra Nevada--Sierra Nevada Ecosystem Project: Final Report to Congress (1996). The text below should be regarded as direct quotations from the source material; page numbers indicated in parentheses refer to the SNEP document and cover the previous paragraph or section.

There is no clear threshold density at that settlement results in significant impacts on health and sustainability of ecosystems. Ecological implications of land conversion for human settlement [include the following]:

- Reduced total habitat area through direct habitat conversion.
 - Reduced habitat patch size and increased habitat fragmentation.
 - Isolation of habitat patches by roads, structures and fences.
 - Harassment of wildlife by domestic dogs and cats.
 - Biological pollution from non-native vegetation alleles.
 - Increased impervious surfaces and increased peak runoff.
 - Increased heavy metal and oil runoff from impervious surfaces.
 - Increased risk of ground water and/or surface water contamination through septic effluent disposal.
 - Decreased ground water flow to surface water systems due to ground water pumping.
 - Modified surface water flow due to irrigation, septic system effluent disposal and treated wastewater discharges.
- (SNEP, Vol. II, Ch. 11).

CHAPTER 4

COMMUNITY SERVICES AND FACILITIES*

Community services include general governmental services such as public works, planning, administration, health care and justice, as well as emergency services including police and fire protection, paramedic services, and search and rescue. Community facilities include public infrastructure such as utilities, schools, community buildings, roads and recreational facilities. Roads are discussed in the Transportation section of this document; recreational facilities are discussed in the Outdoor Recreation section.

COUNTY SERVICES AND FACILITIES

Mono County provides general governmental services to county residents; many of these services are provided to town residents and residents of the unincorporated area as well. These services include the following:

Administration	Justice and Courts	Public Works
Animal Control	Library Services	Sheriff
Finance	Parks and Recreation	Tax Collection
Health Services	Planning and Building	Welfare

County services are provided in Bridgeport, the county seat, and through branch offices in Mammoth Lakes. Many of the services provided by the County have been heavily impacted by the growth of Mammoth Lakes; the Superior Court, the District Attorney and the Probation Department have all experienced increasing caseloads as a result of growth in Mammoth. In addition, the Mental Health Department office is located in Mammoth, and approximately 80% of the Department's service is provided in Mammoth. County services in Bridgeport are provided primarily in the county courthouse and the two courthouse annex buildings. Services in Mammoth are provided at leased offices in Mammoth Lakes.

The County operates recreational and community facilities in most communities; those facilities are discussed in the Outdoor Recreation section of this document. Other facilities operated by the County include cemeteries, landfills and roadyards. The County operates cemeteries at Bridgeport, Mono Lake and Long Valley. Landfills are currently located in Walker, Bridgeport, Benton, Chalfant, Benton Crossing and Pumice Valley; the county is in the process of converting the landfills at Walker, Bridgeport, Benton and Chalfant to transfer stations. A transfer station is currently located at Paradise. Current and future solid and liquid waste facilities are discussed in detail in the County's Solid Waste Management Plan, that is currently being updated. Hazardous waste facilities are discussed in the Hazardous Waste section of this document and in the Hazardous Waste Management Element. The County operates roadyards at Benton, Crowley, Mammoth, Lee Vining, Bridgeport and Walker. Road maintenance operations are discussed in detail in the Transportation section of this document. Figures 5A through 5D show community facilities.

EDUCATIONAL FACILITIES

Mono County is served by two school districts: the Eastern Sierra Unified School District and the Mammoth Unified School District (see Figure 6). Students in the southern portion of the county

*Refer also to the section on "Plans and Policies" for cross-references to other documents that may provide additional site-specific information on community services and facilities.

(Paradise and the Tri-Valley area) may also attend school in Bishop, elementary at the Round Valley School District or high school at the Bishop Union School District.

The Eastern Sierra Unified School District operates elementary schools in Coleville, Bridgeport, Lee Vining and Benton, and high schools in Coleville and Lee Vining. High school students in Bridgeport are bussed to Coleville; high school students in Benton attend school in Bishop; students from June Lake attend school in Lee Vining. Schools in Lee Vining are not currently overcrowded, although other schools in the district are; the school district consequently has been formally identified as "impacted." As an impacted district, it possesses the authority to impose fees on new construction for capital outlay and permanent classroom construction (Mono County Code § 15.09).

In the past few years, there has been some controversy over allowing students from June Lake to attend high school in Mammoth. Proponents of this plan argue that the small size of the Lee Vining facility does not enable it to provide the quality education that Mammoth can.

The Mammoth Unified School District operates elementary, middle and high schools located in Mammoth, and serves students from the Mammoth and Crowley Lake areas. Enrollment at the Mammoth schools fluctuates some with the large transient population in the Town. Enrollment is up, particularly at the elementary school, and the District is considering imposing additional mitigation fees on new development in order to help pay for needed new facilities. The District has land available for future school sites adjacent to the elementary school in Mammoth Lakes (12 acres) and in the Crowley Lake area (20 acres).

Adult education opportunities in the county are available in Mammoth Lakes. The Mammoth branch of the Eastern Sierra College Center, a division of Cerro Coso Community College, offers classes leading to a two-year Associate of Arts degree. The Town's Parks and Recreation Department offers a variety of recreational and adult education classes.

LIBRARY [www.monocoe.k12.ca.us/lib]

The Mono County Library District, administered by the County Board of Education, operates a countywide library system. The main library is located in the county building at Bridgeport; branch libraries are located at the schools in Coleville, Lee Vining and Benton, and at the community centers in June Lake and Mammoth Lakes (see Figure 5C). The library also operates a Bookmobile that circulates throughout the county. Books, articles and other material unavailable through the local library system can be acquired through the Mountain Valley interlibrary loan system out of Sacramento.

HEALTH SERVICES

Hospital and emergency care services are provided at Mammoth Hospital in Mammoth. Limited services are available at Mono General Hospital in Bridgeport. Serious cases are transported by helicopter to facilities in Bishop, Reno, Fresno or Southern California, depending on the case. Basic health care services are provided by several clinics in the county: the Toiyabe Indian Health Clinic in Walker, the Mono General Clinic in Bridgeport, and the Sierra Park Medical Center in Mammoth Lakes. In the past, the center's predecessor, Alpine Clinic, operated a clinic in June Lake under contract with the County at the county facilities at the June Lake Community Center. The Mono County Department of Public Health [www.monohealth.org] provides a variety of health care services at medical facilities located in Mammoth Lakes and Bridgeport. The Department acts as an information and referral center, providing health education materials and preventive medicine services, such as immunizations and screenings for a variety of conditions. The Department also administers a variety of state-mandated public health programs. Mental

health services are provided through the County Mental Health Department, with offices located in Mammoth Lakes.

FIGURE 5A
COMMUNITY FACILITIES – CEMETERIES

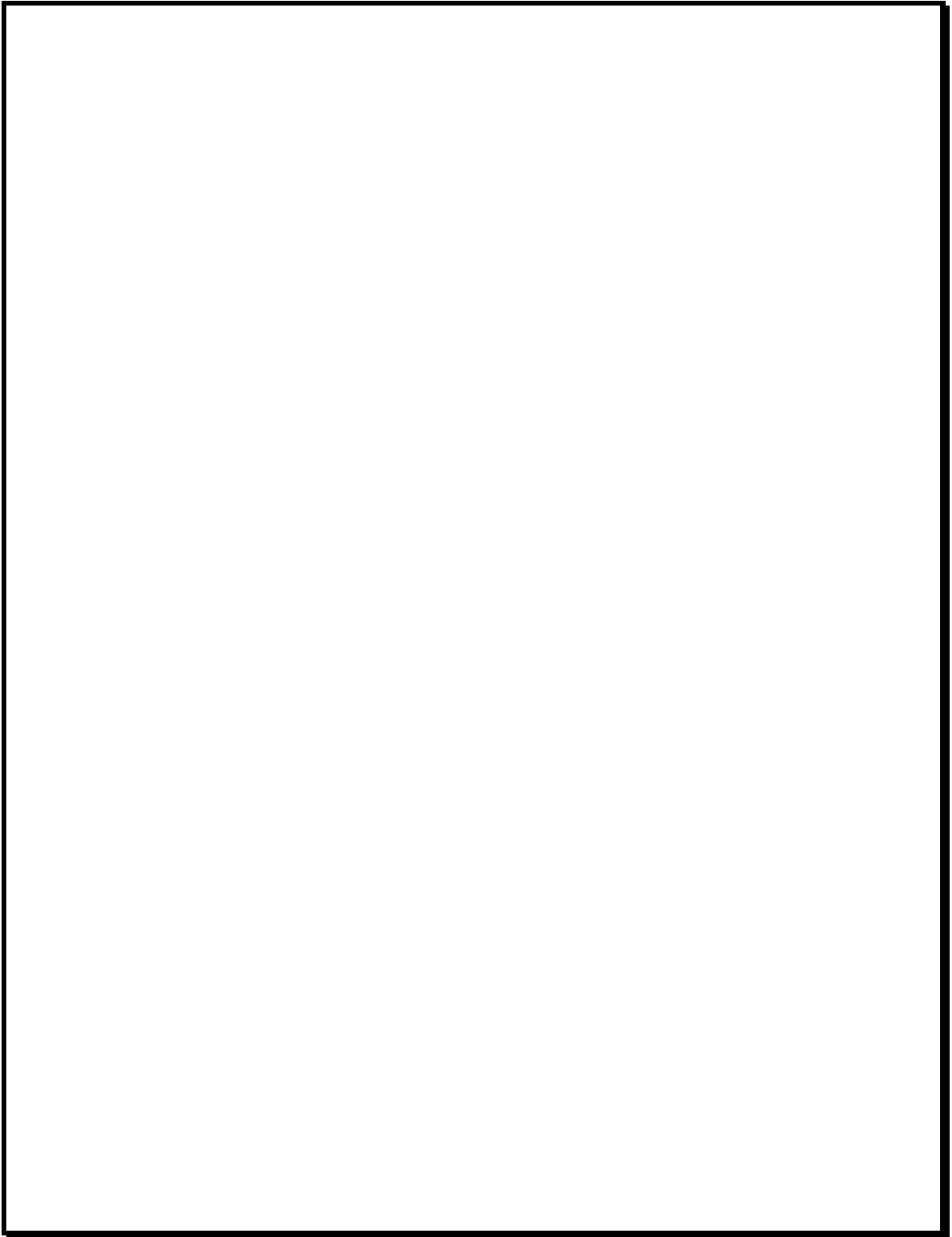


FIGURE 5B
COMMUNITY FACILITIES – SOLID AND LIQUID WASTE FACILITIES

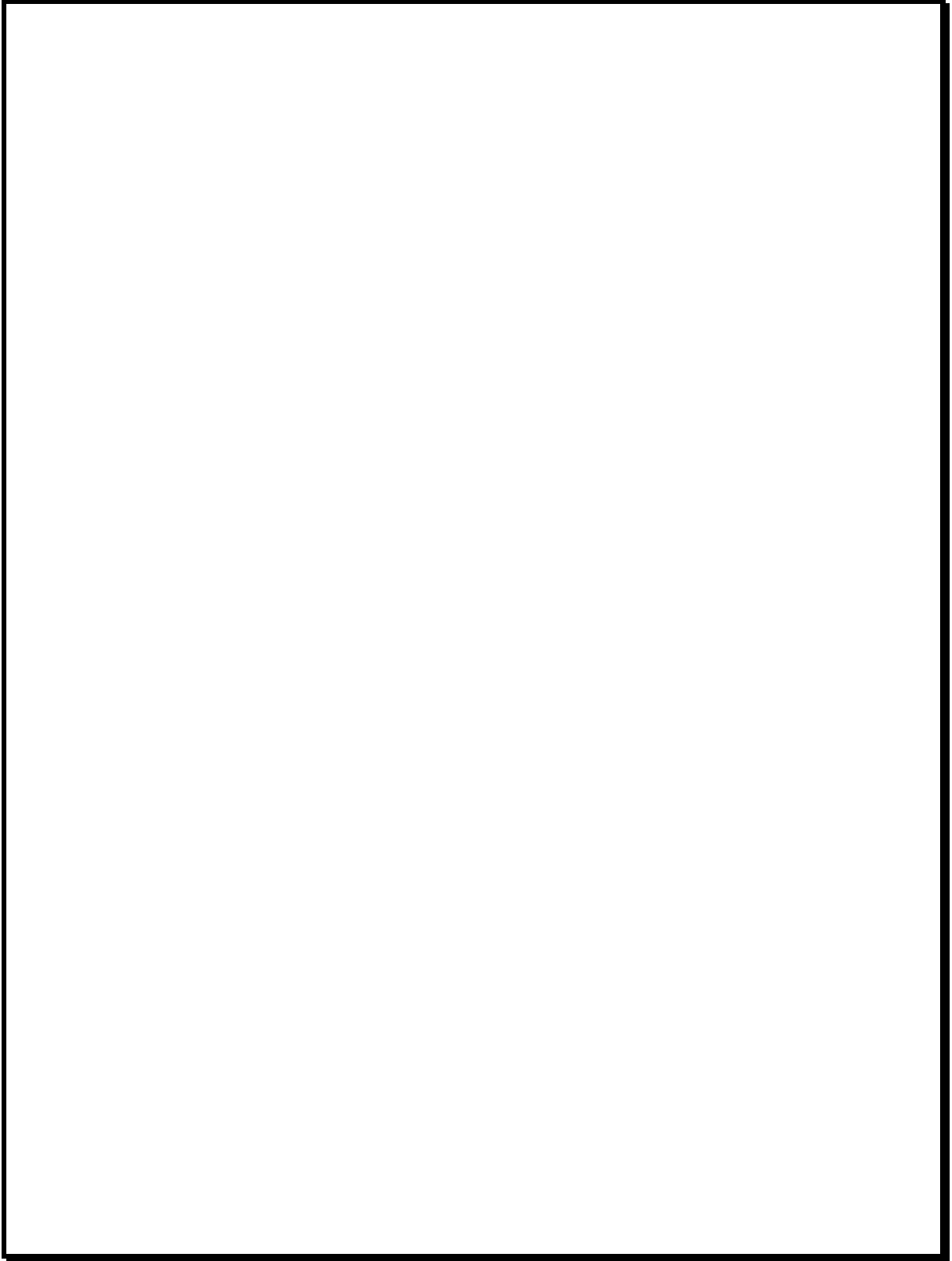


FIGURE 5C
COMMUNITY FACILITIES – LIBRARIES

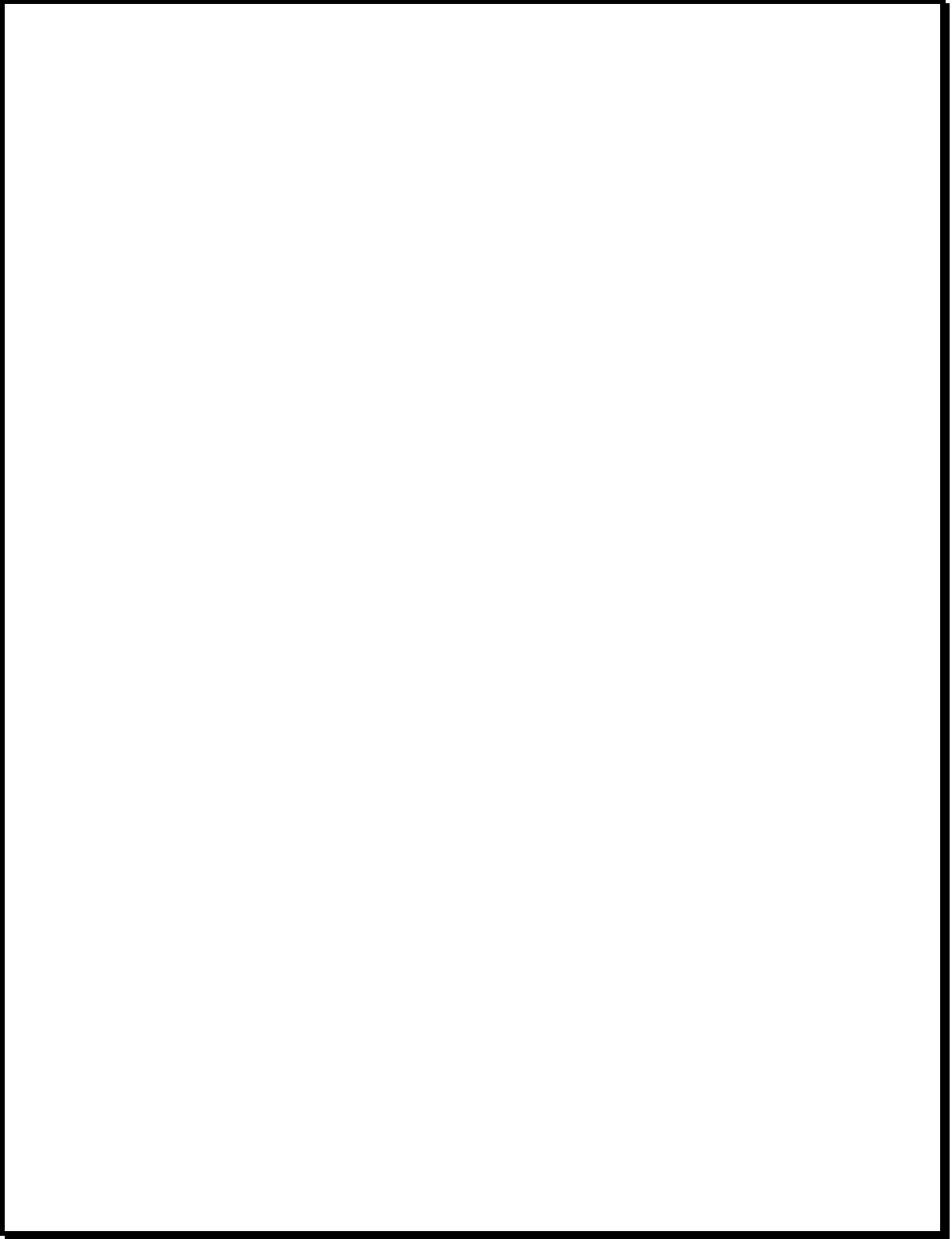


FIGURE 5D
COMMUNITY FACILITIES – FIRE STATIONS

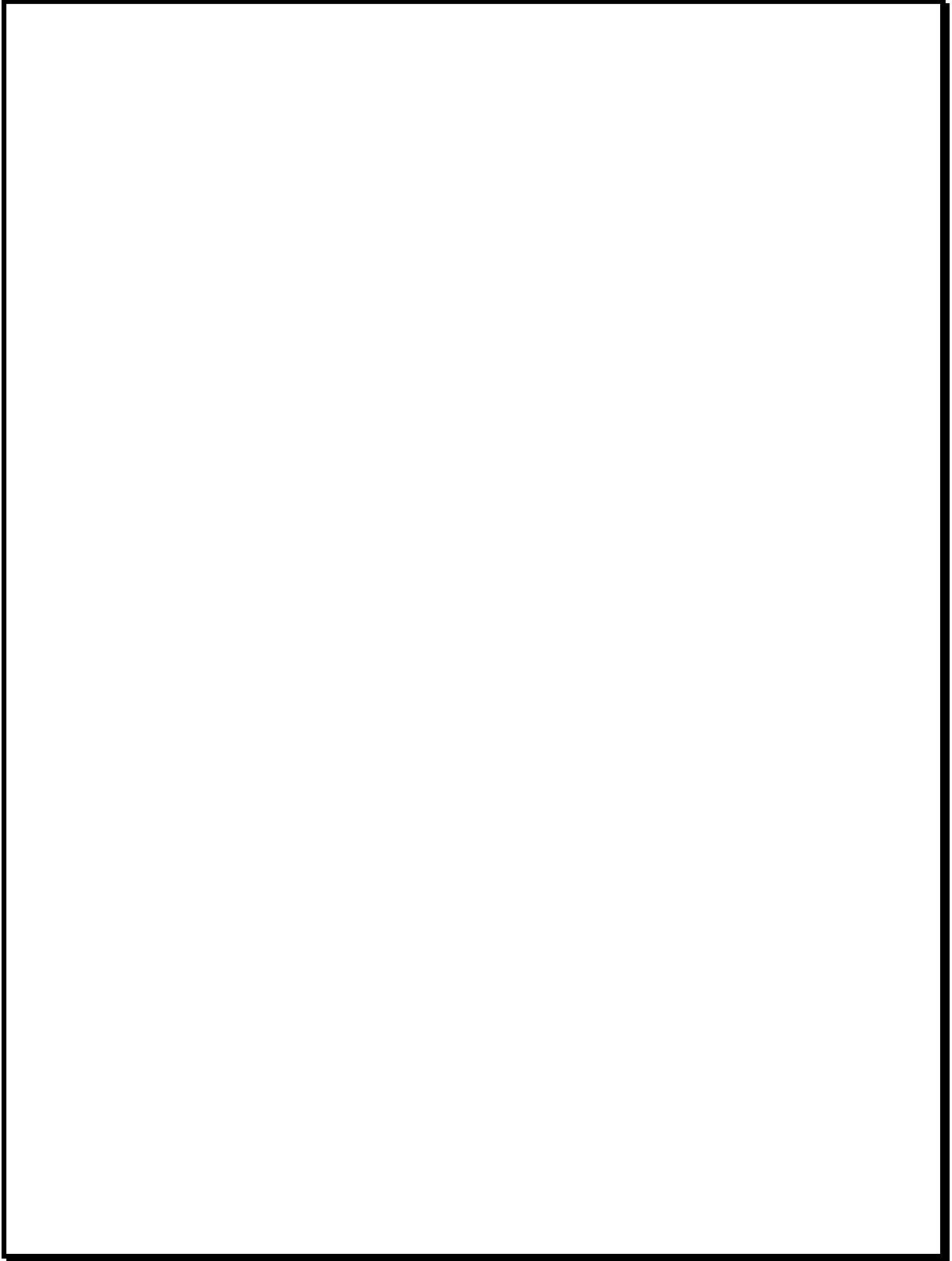
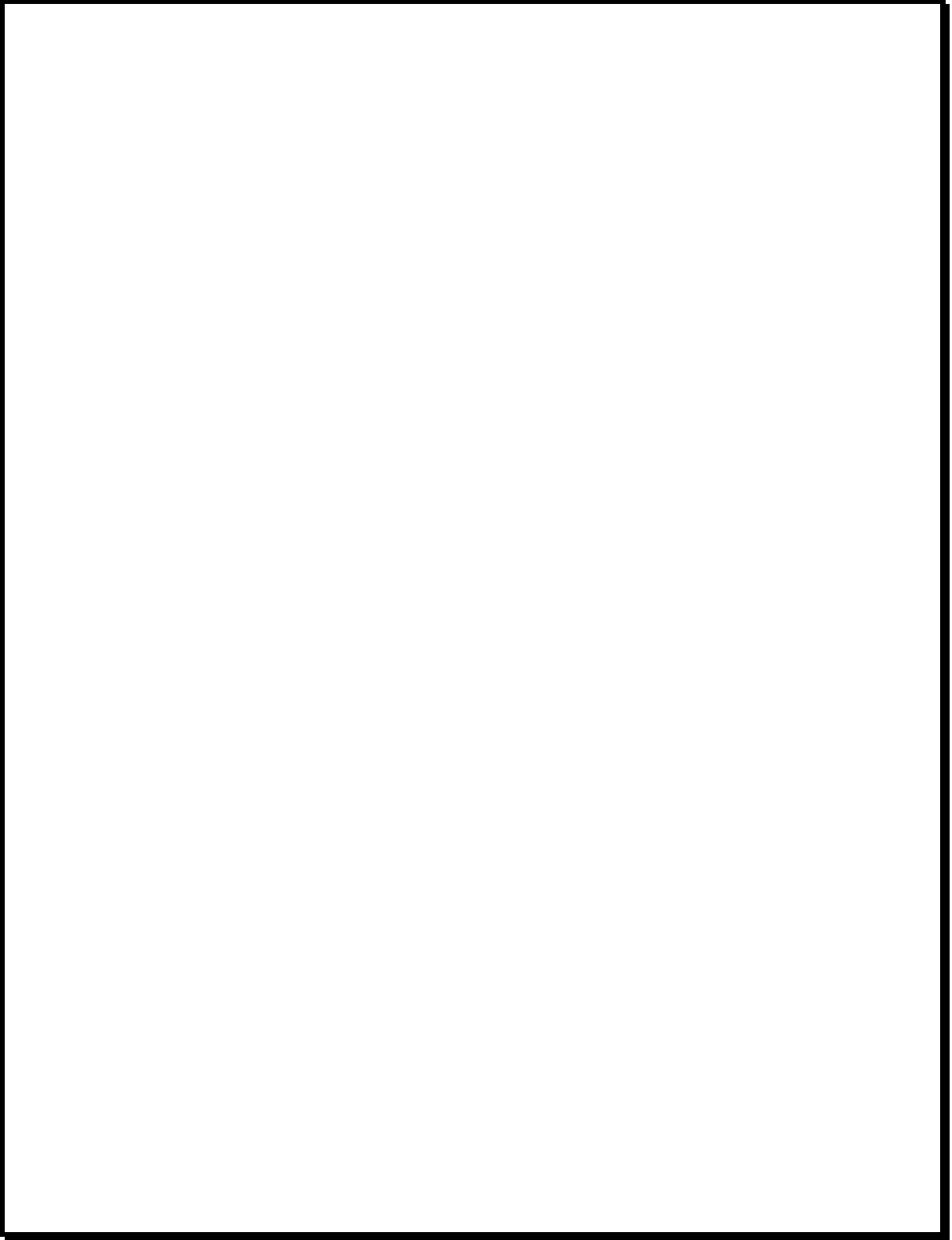


FIGURE 6
SCHOOL FACILITIES



PARAMEDIC SERVICES

The County Paramedic Program provides paramedic services. Units are located in Walker-Coleville, June Lake and Mammoth Lakes. Residents of the extreme southern portion of the county and the Tri-Valley area use emergency services from the Bishop area. Mammoth Hospital and Mono General Hospital also provide emergency medical response services, as do several of the Fire Protection Districts in the county (see Table 2).

FIRE PROTECTION

Local volunteer fire protection districts provide fire protection for community areas. Wildland fires on private property are the responsibility of the California Department of Forestry; wildland fires on public lands are the responsibility of the Forest Service and the Bureau of Land Management. The 11 fire districts in the county have mutual aid agreements with each other and with other state and federal agencies involved in fire protection. In order to serve new development, the fire districts have implemented mitigation fees so that new development will pay for the additional equipment necessary to protect that development.

With the exception of the Antelope Valley, all privately owned lands in Mono County are within the State Responsibility Area (SRA). The State of California recently adopted Fire Safe Standards for wildland fire protection for future development in the SRA. These regulations address emergency access, signing and building numbering, private water supply reserves for emergency fire use and vegetation modification; Mono County has adopted a local ordinance that has the same practical effect as the CDF regulations (Firesafe Regulations, Chapter 22 of the Land Development Regulations).

The 11 fire protection districts in the county provide fire prevention services through such activities as education and development review. The districts also provide varying levels of fire suppression and emergency medical response services to community areas. Table 2 provides a summary description of fire district service levels and capabilities. Additional information about each of the fire protection districts is available in Mono County Special Districts: Inventory of Services and in individual sphere of influence reports for the districts, prepared by Mono LAFCO and on file in the Planning Department.

POLICE SERVICES

The Mono County Sheriff's Department provides police services within the town boundaries by the Town of Mammoth Lakes Police Department and in the unincorporated area. The Sheriff's Department is also responsible for jail operations for persons arrested within the Town limits, coroner operations, processing and serving civil paperwork, and search and rescue operations. Contractual service is provided the Mammoth Lakes Police Department and the Mammoth Lakes Fire Protection District for dispatch service. The Police Department is charged a fee for this service; the Fire District is not. Sixty percent of the bookings for the jail are from Mammoth Lakes, 50% of the coroner's activities are within the town, 5% of the search and rescue efforts are within the town's limits, and 70% of the workload of the civil division is within the town limits.

The sheriff is also the designated County Director of Emergency Services and is responsible for implementing the Mono County Emergency Plan. The California Highway Patrol has primary responsibility for traffic control and accident investigation on state and federal highways throughout the county, including State Route 203 through Mammoth. The Sheriff's Department and the Town Police Department have mutual aid agreements with each other and with surrounding jurisdictions.

TABLE 2
FIRE PROTECTION DISTRICTS IN MONO COUNTY

District	Sq. Miles	# Stations	EMS Provided ^a	ISO Ratings ^b
Antelope	32	2	Yes	9
Bridgeport	6	1	Yes	7/9
Mono City	0.7	1	No	6
Lee Vining	4.9	1	Yes	6/9
June Lake	2.8	1	Yes	7
Mammoth Lakes	8	2	Yes	5/9
Long Valley	114	1	Yes	9
Wheeler Crest	4	1	No	10
Paradise	0.3	1	No	10
Chalfant	75	1	Yes	10
White Mountain	100	1	Yes	10

Notes:

- a. EMS = Emergency Medical Services
- b. The Insurance Service Office (ISO) uses a credit rating system to determine fire insurance rates in different areas. The grading system compares the fire protection that is needed in an area with the fire protection that is locally available. A rating of "1" represents the highest level of fire protection, the lowest fire hazard and generally lower rates. A rating of "10" indicates the lowest level of fire protection.

WATER SYSTEMS

Water for domestic, commercial and agricultural uses is supplied from local groundwater and surface water sources. There are a number of water providers in the county. Many of these providers are small private companies or privately owned systems. Public water systems include those owned and operated by the Birchim Community Services District (Sunny Slopes), Wheeler Crest Community Services District, Bridgeport Public Utility District, Lee Vining Public Utility District, June Lake Public Utility District and the Mammoth Community Water District. Information concerning the facilities and service capabilities of the public water providers is provided in the Mono County Special Districts: Inventory of Services, prepared by Mono LAFCO and on file in the Planning Department. In addition, the Sphere of Influence Reports prepared by LAFCO for each of these districts contains a discussion of the system's current and future capacity and ability to meet demand in its service area. Water supply and demand in June Lake is also discussed in detail in the June Lake Area Plan. All of these documents are on file in the Planning Department.

Mutual water companies provide water in Hilton Creek/Crowley Lake, Paradise, Mono City, the Mountain Meadows subdivision at Crowley Lake, the Pine Glade summer home tract adjacent to Sunny Slopes, and Virginia Lakes. Areas not served by a community water system or a mutual water system use wells or, in a few cases, a local surface water source. In addition to private wells on residential parcels, there are over 100 small independent governmental and privately owned and operated water systems throughout the county. These range from systems operated by the U.S. Forest Service at its campgrounds to a private system at Tom's Place.

Water supply is a primary constraint to development in the county. The amount of water available for local consumption is severely limited since much of the county's water is exported

to Nevada and Southern California. Communities seeking to increase their water supply either must buy water from other entities or acquire additional water rights. The ability to acquire additional water rights is limited by the fact that the water exporters, the federal government or power companies hold most water rights.

Much of the water used for local consumption is groundwater. In most cases, the capacity of the groundwater basins is unknown and the long-term availability of water for development is also unknown. Several communities, although their water supply is sufficient for current development, do not have enough supply to accommodate future growth. These communities are looking for additional sources of water by drilling new wells or by buying water. The Tri-Valley Groundwater Management District regulates the export of groundwater from the Tri-Valley area. Groundwater management districts are being considered in other areas of the county.

WASTEWATER FACILITIES

The Bridgeport PUD, the Lee Vining PUD, the June Lake PUD, the Mammoth Community Water District and the Hilton Creek CSD (see Figure 5B) provide Community sewer systems. Development elsewhere in the county uses private or community septic systems. Information concerning the facilities and service capabilities of the community sewer systems is provided in the Mono County Special Districts: Inventory of Services, prepared by Mono LAFCO and on file in the Planning Department. In addition, the Sphere of Influence Reports prepared by LAFCO for each of these districts contains a discussion of the system's current and future capacity and ability to meet demand in its service area. Wastewater treatment in June Lake is also discussed in detail in the June Lake Area Plan.

Community sewer systems are generally adequate to meet future service demands. In areas not served by sewer systems, development may be limited by requirements pertaining to septic disposal. The Lahontan Regional Water Quality Control Board's other quality control plan for the Lahontan Region set minimum standards for construction of industrial sewage disposal systems.

SOLID WASTE & HAZARDOUS WASTE FACILITIES

Solid waste generated in the county is disposed of at the six county transfer and landfill sites (see Figure 5B). The County owns two of the sites (Benton and Chalfant transfer sites); two are leased from the BLM (Walker and Bridgeport transfer sites); and two are leased from the LADWP (Pumice Valley and Benton Crossing landfill sites). County employees or private contractors under direction of the Mono County Department of Public Works maintain and operate the sites. In Mammoth, a private contractor collects the waste and transports it to the landfill site. In other communities in the county, residents transport their own waste to the landfills. Detailed information about Solid Waste Management in the county is contained in the Solid Waste Management Plan (SWMP), currently being updated, and in operations plans for each landfill and transfer site. Information about hazardous wastes is provided in the Hazardous Waste Element and the Hazardous Waste section of this document.

CHAPTER 5

DEMOGRAPHICS & ECONOMIC DATA*

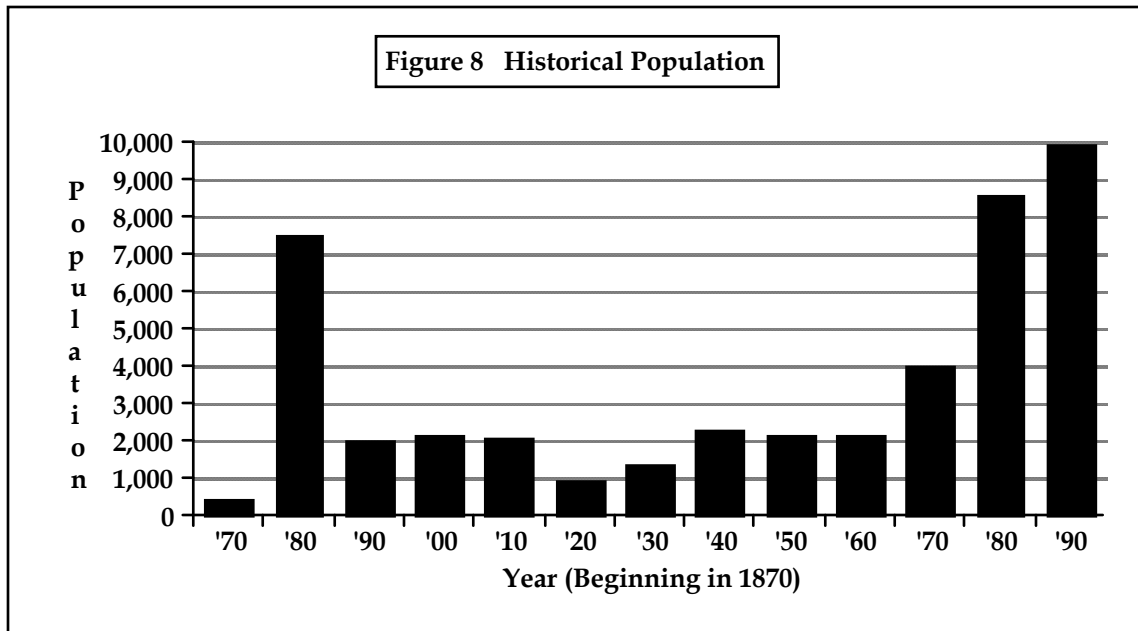
POPULATION CHARACTERISTICS

HISTORICAL POPULATION GROWTH

Figure 7 illustrates Mono County's historical population growth. Population growth over the past century is easily traced to ups and downs in the region's economy, first in mining, later in agriculture, and most recently in recreation. The tremendous jump from 1870 to 1880 is a result of the mining boom at Bodie. In the next decade, the boom subsided into a period of steady work that continued until the mine was shut down in the 1910s. The next large increase in population occurred in the 1960s when Mammoth Mountain Ski Area and the town of Mammoth Lakes began their rapid growth.

During the 1970s, the rural counties of California experienced a significant influx from the metropolitan areas of the state. Mono County grew from 4,016 persons in 1970 to 8,577 persons in 1980, an increase of 114%, one of the highest county growth rates in the state. The population of Mammoth Lakes increased by 198% between 1970 and 1980. During the early and mid-1980s, the growth rate in the county slowed, but by the late 1980s, the growth rate increased again, with most of the growth occurring in Mammoth Lakes.

FIGURE 7
HISTORICAL POPULATION



*Refer also to the section on "Plans and Policies" for cross-references to other documents that may provide additional site-specific demographic and economic data.

RECENT POPULATION GROWTH*

Mono County's population in 2000 was 10,900 with 5,350 (49%) in Mammoth Lakes and 5,550 (51%) in the unincorporated portion of the county (www.dof.ca.gov, Statistical Abstract, 2000, Table B-4). Table 3 shows the county's population growth over the past 30 years.

TABLE 3 Mono County Population, 1970-2000

1970	4,100
1980	8,700
1990	10,050
1993	10,450
1994	10,650
1995	10,550
1996	10,500
1997	10,500
1998	10,600
1999	10,700
2000	10,900

Source: www.dof.ca.gov, Statistical Abstract, 2000, Table B-4.

POPULATION PROJECTIONS

Table 4 shows population projections for the county for the next 20 years.

TABLE 4 Mono County Population Projections, 2000-2020

Year	Total Population	# and % 15+ Years	# and % 15- 69 Years
2010	12,561	10,504 (84%)	9,559 (76%)
2020	14,166	11,506 (81%)	9,991 (71%)

Source: www.dof.ca.gov, Population Projections by Year, Age and Race, 2000.

Table 5 shows population projections by community areas through the year 2020. The projections are based on the following assumptions: that the unincorporated area will continue to house approximately 50% of the total countywide population and that the population distribution in the unincorporated community areas will remain similar to the population distribution in 1990. The last assumption may not hold true. Antelope Valley is experiencing increasing development pressures from the Gardnerville/Carson City area; Chalfant is experiencing a similar pressure for expansion from the Bishop area; and the Long Valley communities are experiencing continuing pressure from residents who work in Mammoth.

*Demographic and economic data in this chapter will be updated as pertinent data become available from the 2000 U.S. Census.

It is important to note that the population projections shown in Table 4 are for permanent year-round residents. Mono County, and particularly community areas such as Mammoth Lakes and June Lake, experiences much higher peak populations during periods of heavy recreational use, a factor that has a direct impact on housing, the transportation system, utilities and social services.

2000 CENSUS

Data from the 2000 Census just became available at the time of printing. The attached summary provides a brief overview of the new Census information. Additional information and analysis of the 2000 Census results will be integrated into the next update of the MEA.